

9471 145 a 72
A
NEW SYSTEM
OF
AGRICULTURE;
OR,

A Plain, Easy, and Demonstrative
METHOD of speedily growing Rich:

Proving, by undeniable Arguments,

That every LAND-OWNER, in *England*, may
advance his Estate to a *double Value*, in
the Space of *one Year's Time*.

TOGETHER WITH

Several very curious INSTRUCTIONS, how to
feed OXEN, COWS, and SHEEP, to much
greater Profit, than has ever yet been known
in *England*.

By a COUNTRY GENTLEMAN.

*The only Gentleman-like way of growing Rich is by the Art of
Husbandry. All other Professions have something in them of the
Mean and Subservient. This alone is Free and Noble; and
the Wealth thus gotten may almost be said to be of a Man's own
Creating.*

Malè agitur cum Domino, quem villicus Docet.

Googe of Husbandry.

Cato, de Agricultura

L O N D O N:

Printed for A. MILLAR, in the Strand. MDCCLV.

[Price 2s 6d]

SUPPLIED
FOR THE
PUBLIC SERVICE



A NEW
 S Y S T E M
 OF
 AGRICULTURE.

ONE would imagine, that, in an Age so fond of *Gain*, it would be but an impertinent, and needless Attempt to court Men to make the *best* of their particular Advantages; yet nothing is a Truth more undeniable, and conspicuous, than that *They*, who are, in *Posse* the *richest* in the Kingdom, are, in *Esse*, the most *poor* and miserable.

I appeal to every Part of every County, for a Proof of my Assertion, why else are our *Land-owners* obliged to stoop to the Oppression of the *Money-mongers*? --- Why else do the devouring Mortgages consume so many splendid Fortunes? And why do such

B

con-

considerable Numbers of young Heirs live idly and contemptibly, for a tedious train of Years, in order to reduce a little Debt, which has been charged upon their Patrimony.

That it is the Gentlemen's own faults, who suffer these, or any of these Inconveniencies, shall be proved by as plain a Demonstration, as any in *Euclid*; and that the Mortgages, so fatal to the Landed Interest, may easily be cleared by the very Land, so mortgaged. And why this is not made a common Practice, is a Riddle, which requires another *Oedipus*.

I am very sensible, how difficult a Task I have undertaken, to disarm People of that inconsiderate Prejudice, with which they war against all offers of this Nature. 'Tis a surprizing Reflection, that Men should bid Defiance to Reason, and bar a Door against the Entrance of their own Advantage; yet, there is no ridiculous Thing more general.

'Tis a very great Misfortune to *England*, that the Cultivation of her Lands is in the meanest of her People; Men, whose Obscurity of Birth, and Narrowness of Education, do not only render them unable to *make* Improvements,



provements, but unwilling to *hear* of them. ---They daily see the greatest, and most noble *Effects* of Nature, without a Thought upon their *Causes*; and are so much less active, than the Clods, they deal with, that no *Manure*, no *Culture* can impregnate their Imaginations.

If you tell one of these, that such a Piece of Ground, so and so managed, would produce a very great Improvement---He will content himself to answer, with an unaccountable Stupidity, that, *a great many good Husbands had possessed that Ground before him, and yet it had continued, time out of mind, in its present Condition; that, had it been possible to make such great Advantages, it had certainly been found out in their Time; and that, as for his Part, He don't care to concern himself with Projects.*---Drive him from this Refuge, and he tells You, *that the Charge of the Improvement may be greater than the Profit.* And if, to obviate this Objection, too, you name some Neighbour, who, for a trifling Charge, has made a far worse Piece of Ground, of equal Value with the best in the County---*Why, that may be truly,*
B. 2 ---but,

---but, then, that was *Land of a different Nature*, and an *honestest Man* might have *worse Luck*.

These, or some such miserable Shifts, are the Blinds, they build between themselves, and their Prosperity; so that, let his Neighbour grow rich, on one Side of the Hedge, while He starves on the other; let another plow with *two* Horses, while he toils with *four*; 'tis all one to Him, and the more his wiser Friends endeavour to reform him, the more he arms his Ignorance with an impenetrable Obstinacy.

And yet, would this were All:---'Tis no new thing to find the *Low* Part of Mankind averse to Knowledge; the Frame of their Minds is not moulded to a Relish of Delights, above them.---But that our *Gentlemen*, many of them Persons of Genius, Wit, and Judgment, that *They* should give in to such a vulgar Error, and neglect nothing so much, as those very Lands, by which they are distinguished among Men; and from whose single Value they receive both their *Honour*, and their *Bread*, is a Misfortune, which, as no *wise* Man can easily account
for,

for, so no *good* Man can wish the continuance of.

Before I finish this Discourse, I shall endeavour to lay open the Causes of this publick Calamity, at large: But will, here, only observe, in general, that there are two Things to be regarded, as *Requisites*, in whatever Profession we apply ourselves to; First, Is it *reputable*? Secondly, Is it *profitable*? And surely, if we were but once convinced, that *Husbandry* were not only the most *gainful* Employment. but the most *noble, just, and honourable*;---an Employment, which the wisest Writers of Antiquity, *Priests, Poets, Princes, and Philosophers*, have celebrated, and preferred before All other; and the greatest *Emperors*, and mightiest *Heroes* of the Universe, not only delighted in, but practised with their own Hands;---Were we once, I say, convinced of this;---The Scorn would leave this glorious Art, and fix upon the Follies of those mistaken Judges, who believe it an Employment, *too low*, for the Practice of a *Gentleman*.

Behold, says our ingenious *Cowley*, in his excellent Discourse on this Subject,---*Behold the Original, and primitive Nobility of all those great Persons, who are too proud, now, not only to TILL the Ground, but almost to TREAD upon it ; we may talk what we please of LILLIES, and LYONS RAMPANT, and spread Eagles in Fields of OR, or ARGENT, but if Heraldry were guided by right Reason, a PLOW in a FIELD ARABLE, would be the most noble, and antient Arms.*

How easy would it be to prove, from the concurrent Testimony of the Antients, the uncontested Superiority of this Art to any other : Nay, a Man might draw Proofs from the Scriptures themselves, that Husbandry is not only a recommended Profession, pleasing to God, and beneficial to Man, but the only worldly Business, we have to do, in this Life, and the very individual Errand, we were sent into Earth upon.---All other Things are subservient to this one great Pillar of the World ; *Arts and Sciences* are but the polishing of this Marble ; All offices, *Divine, Civil, and Military*, are the several Dependencies of this Heavenly Art ; --- Strength, Honour,

Honour, Glory, Learning, and Dominion,
are the Children of her Influence.

But I will not go so far back ; --- I need not : Modern Instances abound ; and we have Proofs enough from later writers, nay, from *English* writers, to convince the most *despairing*, of its *Profits*, and the most *disdainful*, of its *Reputation*.--- I will bring a Croud of witnesses, whose Depositions you shall hear, and, then, I will proceed to inform you, what the Husbandry, *They* mean is ; and how easy to be understood by any Undertaker ; tho' it differs, *all Heaven's Breadth*, from the present clumsy Practice, which usurps the Appellation.

And first, not to mention that learned Nobleman, *Lord Chancellor Bacon*, great Part of whose Natural History is compos'd of Axioms in Husbandry, for which he found Leisure from the highest office in the Kingdom. --- Let us hear *Sir Richard Weston*, (almost as great a Man, as the other) in his *Legacy to his Sons*.

“ By Husbandry, *says he*, you may nobly
“ augment your Estates, and will receive so
“ much the more Profit, and Praise, by how

“ much more Diligence, and Industry, you
 “ govern your Affairs with.---You will not
 “ only be imitated, but honoured, by your
 “ Neighbours, when they see your Labours
 “ prosper, by converting barren Ground,
 “ which has, as such, been left unhusband-
 “ ed for Ages, into excellent Arable, Pas-
 “ ture, and Meadow.---He certainly is wor-
 “ thy great Praise, and Honour, who, pos-
 “ sessing a large, and barren Demesne, con-
 “ strains it, by his Industry, and Labour,
 “ to produce extraordinary Plenty, not only
 “ to his own Profit, but that of the Pub-
 “ lick also. *Cato* says, that 'tis a burning
 “ Shame to a Man, not to leave his Inheri-
 “ tance greater, than he receiv'd it: And
 “ that He, who loses, by his Sloth, what
 “ his Lands might yield him, is a Sinner,
 “ and despises the Liberality of God.---'Tis
 “ a Thing much celebrated by Antiquity,
 “ and thought the noblest way to gather
 “ Wealth, to employ our Wit, and Money,
 “ on our Land, and, by that means, aug-
 “ ment our Estates.---If you observe the
 “ common Course of Things, you will find,
 “ that Husbandry is the End, which Men
 “ of

“ of all Conditions, aim at :---Why do *Sol-*
 “ *diers, Scholars, Lawyers, Merchants, and*
 “ Men of *all* Trades, and Professions, toil,
 “ and labour, with great Eagerness, but to
 “ get Money? And, when they have got
 “ that Money, what is their next Aim, but
 “ to purchase Land?---Why do they buy
 “ Land, but to receive the Profit, it produ-
 “ ces?---And, how shall that Profit be pro-
 “ duc’d, if not by Husbandry? So that, by
 “ Degrees, let a Man steer what Course
 “ thro’ the World he pleases, at last, He
 “ comes to Husbandry; which, as it is the
 “ most general Employment of Mankind,
 “ so is it the most natural, and holy, being
 “ commanded by the Mouth of God Him-
 “ self to the Practice of our Forefathers.
 “ You will find the Improvements in Hus-
 “ bandry, when you once experience them,
 “ to be very delightful to you; and so ex-
 “ ceeding profitable, that it will make you
 “ diligent; for no Man, of any Art, or Sci-
 “ ence whatsoever, unless it were a *Gold-*
 “ *maker*, ever pretended to so much Gain,
 “ by any other means, as you shall see de-
 “ monstrated in this Treatise. The *Usurer*
 “ doubles

“ *doubles* but his Principal in seven Years,
 “ even by Interest upon Interest; But, by
 “ my Legacy of Husbandry, you shall learn
 “ to do more than *treble* your Principal in
 “ one Year’s Compass. &c.”

Thus far *Sir Richard*, who publish’d a Book relating to the Practice of Agriculture; And, by one, which follow’d it long after, by another Hand, under the Title of *Annotations on the Legacy of Husbandry*, we may perceive the great Good, it did the Publick, by putting them upon Improvements, which, till then, they never dream’d of.

Page 220, of these Annotations, we have a Letter from a very learned Gentleman, which begins thus.

“ I have read the Book of Husbandry
 “ thorow, and am very much delighted with
 “ the many profitable, and ingenious Discoveries, it contains; insomuch that I cou’d
 “ wish myself a Farmer in the Country, to
 “ play the practical Philosopher in so agreeable a Manner.---I remember, when I
 “ was a Student, in *Cambridge*, I was wont
 “ to maintain, that He was no natural Philosopher,
 “

“ losopher, who cou’d not advance his Til-
 “ lage, Cattle, Fishing, Fowling, and other
 “ Affairs, with more Dexterity, and to
 “ greater Profit, than another Man, who
 “ pretends no Skill in Nature :---I have read
 “ a like Hint, somewhere in *Ramus*, who
 “ refers all Arts to profitable Use in Man’s
 “ Life; abhorring the vain Ostentation of
 “ the sophisticated Universities.

In the same *Annotations*, Page 237, we have an Account of the Profit, made by one Mr. R. H. who sow’d Clover, according to *Sir Richard’s* Directions---His words are, as follow.---

“ The Ground, I sow’d, was about two
 “ Acres; I sow’d Barley, and after that 15lb
 “ of Clover-feed on each Acre; my whole
 “ Charge was much more than paid by the
 “ Crop of Barley; and the 28th of *May*
 “ next, I mow’d the Clover, and, for that
 “ first Cutting, refus’d five Pounds: In *An-*
 “ *gust*, I mow’d for Seed, and the whole
 “ Year’s Profit of my two Acres was thirty
 “ Pounds, besides the after-Pasture.

Then

Then comes Another, with this Certificate.

---“ I sow'd four Acres, according to your
 “ Directions, and had 20 Bushels of Seed,
 “ and 12 Loads of Hay, at twice mowing;
 “ The first Crop I mow'd was the 19th of
 “ May last; and, I am sure, I speak much
 “ within Compass, when I tell you, that
 “ my four Acres yielded me, in this one
 “ year, *fourscore Pounds.*---*Henry Crutenden.*

A Gentleman of Kent, by Name, *Sir Thomas Payton.*---“ did, upon six Acres of Clover, maintain, from the 15th of April,
 “ to the 15th of October, 13 Cows, 10 Oxen, 3 Horses, and 26 Hogs, which came
 “ to the Profit of 20 Nobles an Acre, for
 “ the half year only.-*Annotations, Page 245.*

Again---“ Certain *Dutchmen* have sent to
 “ their own Country for a Kind of Trees,
 “ call'd *Flanders Ashes*, which they planted,
 “ here, in our Fens of *Lincolnshire*: The
 “ Charge amounted to about 3 Shillings a
 “ Tree; and they grew so fast with us, that
 “ at the End of 3 Years, they were worth
 “ twenty Shillings a piece for Timber.

Annotations, Page 270.

We

*We shall have more of these Examples,
anon: Let us, now, see another Author, on
this Head.* Cowley, Edit. 4. P. 98.

“ The *first* Wish of *Virgil* was to be a
 “ good *Philosopher*: The *second*, a good
 “ *Husbandman*; And God dealt with him,
 “ just as he did with *Solomon*; Because he
 “ pray’d for Wisdom in the first Place, he
 “ added all Things else, which were to be
 “ desir’d; He made him one of the best
 “ *Philosophers*; and the *best* *Husbandman*:
 “ And, to adorn, and communicate both
 “ those Faculties, the *Best* Poet: He made
 “ Him, besides all This, a *rich* Man; and
 “ a Man, who desir’d to be *no richer*.---To
 “ be a *Husbandman* is but a Retreat *from*
 “ the World, as it is *Man’s*; *into* the World,
 “ as it is *God’s*.---Husbandry is, as *Columel-*
 “ *la* calls it---The nearest Neighbour, and,
 “ without Doubt, the next in Kindred to
 “ *Philosophy*.---It does certainly compre-
 “ hend more Parts of *Philosophy*, than any
 “ one Profession, Art, or Science, in the
 “ World besides; And, therefore, *Cicero*
 “ says, The Pleasures of This Life come ve-
 “ ry near to *those* of a *Philosopher’s*.---
 “ There

“ There is no other sort of Life, that af-
 “ fords ſo many Branches of Praise to a Pa-
 “ negyriſt : The *Utility* of it to a Man’s
 “ ſelf, The *Uſefulneſs*, or, rather the *Neceſ-*
 “ *ſity* of it to all the reſt of Mankind ; The
 “ *Innocence* ; The *Pleaſures* ; The *Antiqui-*
 “ *ty* ; The *Dignity*.---The *Lucre* of it is
 “ not, now, ſo great, in our Nation, as ari-
 “ ſes from the Merchandiſe, and Trade of
 “ the City ; We have no Men, now, fetcht
 “ from the Plow to be made *Lords*, as they
 “ were in *Rome*, to be made *Conſuls*, and
 “ *Dictators* ; The Reason of which is from
 “ an evil Cuſtom among us, that no Men
 “ put their Children to be bred up *Appren-*
 “ *tices* in Husbandry, as in other Trades,
 “ but ſuch, who are ſo poor, that, when
 “ they come to be Men, they have not
 “ wherewithal to ſet up in it ; and ſo can
 “ only farm ſome ſmall Parcel of Ground,
 “ whoſe Rent devours all but the bare Sub-
 “ ſiſtance of the Tenant, whiſt They, who
 “ are Proprietors of the Land, are either too
 “ proud, or, for want of Education, too
 “ ignorant to improve it ; tho’ the Means
 “ of doing it be as eaſy, and certain in This,
 “ as

“ as in any other Track of human Com-
 “ merce.---If there were always two, or
 “ three thousand Youths for 7 or 8 Years
 “ bound to this Profession, that they might
 “ learn the whole Art of it; and, after-
 “ wards, be enabled, by a moderate Stock
 “ to be Masters in it, I cannot doubt, but
 “ that we should see as many *Alderman's*
 “ Estates made in the Country, as now we
 “ do, out of all Kinds of merchandizing,
 “ in the City---*There* are as many ways to
 “ be rich, and, which is better, there is no
 “ *Possibility* to be poor, without such Negli-
 “ gence, as can neither have Excuse, nor
 “ Pity.

“ As for the *Necessity* of this Art, it is
 “ evident enough; since *This* can live with-
 “ out all other, and no one other without
 “ *This*.---Many Nations *have* liv'd, and some
 “ *do*, still, without any Art but This; And
 “ almost All others are beholding to This
 “ for most of their Materials.

“ The *Innocence* is the next Thing for
 “ which I commend it; and, if Husband-
 “ men preserve not *That*, they are much to
 “ blame; for no Men are so free from the
 “ Temptations

“ Temptations of Iniquity.---*They* live upon
 “ an Estate, which is given them by their
 “ Mother ;---*Others* upon an Estate, which
 “ is cheated from their Brethren : *They* live
 “ by what they can get by Industry from
 “ the Earth ; *others* by what they can catch
 “ by Craft from Men.---*They* live, like
 “ Sheep, and Kine, by the Allowances of
 “ Nature ; *Others*, like Wolves, and Foxes,
 “ by the Acquisitions of Rapine.---We are,
 “ *here*, among the vast, and noble Scenes
 “ of Nature ; we are, *there*, among the pi-
 “ tiful Shifts of Policy.---We walk, *here*,
 “ in the Light, and open ways of the di-
 “ vine Bounty :---We are groping, *there*, in
 “ the dark, and confounding Labyrinths of
 “ human Malice : Our Senses are, *here*,
 “ feasted with the clear, and genuine Taste
 “ of their Objects, which are All sophisti-
 “ cated, *there*, and overwhelm’d with their
 “ Contraries.---*Here*, Pleasure looks, like a
 “ constant, beautiful, and modest *Wife* :
 “ It is, *there*, a fickle, impudent, and
 “ painted *Harlot*.---*Here* is harmless, and
 “ cheap Plenty ;---*There*, a guilty, and ex-
 “ pensive Luxury.

“ The

“ The *Antiquity* of this Art is certainly
 “ not to be contested by any other.---The
 “ Three first Men in the World, were a
 “ *Gardiner*, a *Plowman*, and a *Grazier* :
 “ It is for this Reason, I suppose, that *Ec-*
 “ *clesiasticus* forbids us to hate Husbandry,
 “ *Because*, says he, *The most High* has creat-
 “ ed it. We were All *born* to this Art, and
 “ taught by Nature to nourish our Bodies
 “ out of the same Earth, they were made
 “ of ; and to which, at last, they must re-
 “ turn, and pay for their Subsistence.

“ These Considerations make me fall in-
 “ to the Wonder, and Complaint of *Colu-*
 “ *mella*, how it shou'd come to pass, that
 “ All Arts, or Sciences, *Metaphysick*, *Phy-*
 “ *sick*, *Morality*, *Mathematicks*, *Logick*,
 “ *Rhetorick*, nay even *Vaulting*, *Fencing*,
 “ *Dancing*, *Cooking*, *Dressing*, *Carving*,
 “ and such like *Vanities*, should All have
 “ publick Schools, and Masters ; and yet,
 “ that we should never see, or hear of any
 “ Man, who took upon him to profess an
 “ Art so virtuous, so profitable, so honour-
 “ able, and so necessary ! Who is there
 “ among our Gentry, that does not enter-

“tain a *Dancing-master* for his Children,
 “as soon as they are able to walk. But
 “did ever any Father provide a Tutor, to
 “instruct his Son, betimes, in the Nature,
 “and Improvements of that Estate, which
 “he intends to leave him? *That* is at least
 “a Superfluity; and *This* a Defect in our
 “manner of Education; And, therefore,
 “I cou’d wish, that One College, in each
 “University, were erected, and appropria-
 “ted to *this* Study, as well as there are to
 “*Medicine*, and the *Civil Law*.

“Almost All the Poets, except those,
 “who were not able to eat Bread without
 “the Bounty of Great Men, that is, with-
 “out what they could get by flattering
 “them, have not only withdrawn them-
 “selves, from the great World, into the
 “Happiness of a retir’d Life; but have com-
 “mended, and adorn’d Nothing so much,
 “by their everliving Poems.---*Hesiod* was
 “the first, or second Poet in the World,
 “that remains yet extant, and *He* is the first
 “writer, too, of the Art of Husbandry, &c.”

Mr. *Cowley* adds a great deal more, which
 I forbear to insert; and only observe, that,

as no Man knew Truth more clearly, than That Author, no Man cou'd possibly have delivered it more gracefully---Honest Mr. *Walter Blich* is a Person, to whom we are much indebted for a free Communication of his Knowledge in this Art:---He was himself a *Husbandman*, and seems but to have wanted the Addition of a little Learning to his great Experience, to have made him even more useful, than he is.---He knew, too well, the surly Backwardness of most Countrymen to receive new Notions, and reproves it very sharply, in an Epistle before an excellent Piece of His, entitled the *Improver Improved*, &c.

“ There is, *says he*, among you a calumniating, and depraving every new Invention ; and the most guilty of this are your mouldy, old leaven'd *Husbandmen*, who Themselves, and their Forefathers, have been accusom'd to such a course of Husbandry, as they *will* follow, and no other. Their Resolution is so fix'd, that no Issues, or Events shall change them ; If their Neighbour has as much Corn on *one* Acre, as they from *two*, upon the same

C 2

“ Land,

“ Land, yet, so he *will* continue: Or, if
 “ an Improvement be offer’d to him, and
 “ all his Neighbours, he’ll oppose it, and
 “ degrade it: What, forsooth, says he,
 “ who taught you more Wit, than your
 “ Forefathers? Wou’d *They* have neglected
 “ this Advantage, had there been any? and
 “ I know not what simple Chaff, to blind
 “ themselves.----This proud, unteachable
 “ Spirit an ingenuous Man abhors, which
 “ banes, and poisons the very Plenty of our
 “ Nation.---These Prejudices both upon
 “ your Minds, and Practices, which bolt
 “ you out from Wealth, and Glory, my
 “ dear Friends, and Fellow Husbandmen,
 “ I pray you, lay aside, and do but walk
 “ with me in Charity through this Discourse,
 “ and I doubt not to convince you,” &c.

The same good Man, in another Place, tells us---

“ To multiply more *Scripture*, where all
 “ *Experience* makes it clear, is but to prove
 “ a Principle ungain-said.---The *Usefulness*
 “ of it is no less, than the Maintenance of
 “ our Lives, our Estates, the Kingdom,
 “ and the whole World: Nay, the Advance-
 “ ment of the Fruits, and Profits of the
 “ Earth,

“ Earth, by Ingenuity, is little less, than
 “ the Addition of a *new World*: All other
 “ Callings proceeded hence; The *Merchant*
 “ is a gallant Servant to the State, He fetches
 “ it from far, and 'tis a great Inrichment
 “ to the Nation: But he purchases from
 “ others; He raises it not from *Nothing*, but
 “ parts with good Silver, or Gold, or some
 “ other Equivalent for it; But This *Mer-*
 “ *chant in Husbandry*, raises it from the
 “ Earth; which, were it not for his Indus-
 “ try, would neither yield, nor discover its
 “ Riches: And what parts he with? At
 “ what Rate does he purchase? why truly
 “ with the Wages of those very Poor, main-
 “ tained in Labour, who must be, else, at
 “ the same Charge, maintain'd in Idleness:
 “ Oh! the Excellency, Antiquity, and Use-
 “ fulness of this noble Art! First, remem-
 “ ber your Service to God, and let all the
 “ rest of your Application be pour'd out up-
 “ on Husbandry, accounting *That* the second
 “ Thing necessary.---*A Blessing is upon the*
 “ *Head of Him, that tilleth Corn; and the*
 “ *Thoughts of the Diligent shall bring Abun-*
 “ *dance.*” *Improver Improv'd*, P. 4, and 5.

What the Skill of this Author enabled him to do, and teach others, may be best seen by his own Examples.---

“ As for boggy Lands, *says he, in Page*
 “ 26 *of the same Book*, I have recover'd several Pieces next to plain Quagmires; The
 “ means of doing which you have been
 “ taught in the last Chapter; so bad, and so
 “ boggy, that no Cattle cou'd tread upon it,
 “ but they were lost; and yet, I recovered
 “ it, by this Course, to perfect Soundness,
 “ and made it worth thirty, and forty Shillings an Acre? And the like I dare undertake in any such Lands whatever.

“ *Again, Page 102.---*I once held a Piece
 “ of Land, full of your soft Rushes, as high
 “ as any ordinary Beast, and very wet: I
 “ conceiv'd it not able to bear Barley, 'twas
 “ so weak, and barren, so cold, and queasy;
 “ and the Neighbours, very able Husbandmen,
 “ so discourag'd me, that they desir'd me to forbear Tilling it; yet I, resolving to make a full Tryal, set upon it,
 “ according to the Rules just now given you: and, for the first Crop, which was
 “ but of Oats, I cou'd have had Six Pounds
 “ an

“ an Acre, being offer'd it by an Oatmeal
 “ Man, unask'd, as it stood upon the
 “ Ground”.---

Page 133---*Speaking of the right Art of
 liming Ground, he says, “ ---whole Coun-*
 “ tries, and as many Counties, that were na-
 “ turally, as barren, as any in the Nation,
 “ have upon Land, not worth a Shilling an
 “ Acre, rais'd after such a Liming, as good
 “ Wheat, Barley, white, and grey Pease,
 “ as *England* yields; yea, they will take a
 “ Parcel of Land from off a Lingy Heath,
 “ or Common, not worth the having; Nay,
 “ many will not have it, if they might; and
 “ raise as gallant Corn, as any whatsoever,
 “ worth five, or six Pounds an Acre.”

In another Place he describes the Nature,
 and Benefit of *Marle*, and, endeavouring to
 persuade a more general Search after it, he
 gives this Instance of its Excellence.

“ Upon a hard, enclos'd, woodland Farm
 “ I rented, I had about fifteen or sixteen
 “ little short Lands, which were so gravelly
 “ of Nature, that there was but two Inches
 “ of Earth, before you came to as perfect
 “ Gravel, as any *Highway*; nay, 'twas so
 C 4 “ exceeding

“ exceeding barren, that it turned, in many
 “ Places, to *Cinder*, like the Corruption of
 “ Coals, Iron, and Fire congeal’d, which
 “ the *Smith* throws out of his Forge : How-
 “ ever, resolving to make an Experiment,
 “ I search’d for *Marle*, and found it, where
 “ none had ever been known in the memory
 “ of Man, nor within many Miles of it : I
 “ imagin’d, it might lie in an old strong,
 “ *Clay Pool*, which I cleans’d, and succeeded :
 “ ---And, because I wou’d make an unde-
 “ ceivable Experiment, I carried out the
 “ Mud, which I took from the Pool,
 “ and with That covered two Lands ; I
 “ dung’d two more, and two I Sheep-fold-
 “ ed : I marled Three or Four, and one I
 “ neither folded, dung’d, marl’d, nor mud-
 “ ded ;---yet, Plow’d them all alike, and
 “ Sow’d them with Wheat.---From my mar-
 “ led Land I reap’d most incomparable Corn ;
 “ from the rest very good, except the Land,
 “ on which I laid nothing ; and, from That,
 “ I reap’d nothing, no not so much as Straw,
 “ tho’ I had given it the same Seed, and the
 “ same Tillage, as I gave the Rest.---The
 “ next Year I sow’d Barley ; the marl’d Land
 “ produc’d

“ produc’d extremely; the others began to
 “ decay, and, from the unmanur’d Spot,
 “ which had this Year been sown with Oats,
 “ I cou’d not reap so much as a single Stalk.
 “ ---The Third Year I marl’d the unfruitful
 “ Piece, and then, That, which cou’d bring
 “ forth Nothing the two former Years, pro-
 “ duc’d as fine a Crop of Corn, as ever was
 “ seen; and continued to yield most plenti-
 “ ful Harvests, for twelve or fourteen Years
 “ together, without any other Addition of
 “ Dung, Soil, or the least Compost whatso-
 “ ever.” --- *Improver Improv’d, P. 137.*

He afterwards tells us, P. 164, of a
 Gentleman, “ who had, by Accident,
 “ (while a Boy) planted a hundred *Ashes*
 “ about his Father’s Grounds, which very
 “ Trees He afterwards sold for five hundred
 “ Pounds :---*This is yet exceeded by his other*
 “ *Relation* of a Merchant, who planted so
 “ much Wood, in his own Life Time, as
 “ he refus’d fifty thousand Pounds for the
 “ Purchase of,”

He goes on with a pretty Story of a poor
 Woman, “ whose whole Estate was a little
 “ Slip of garden Ground, with an Ash or
 “ two

“ two in the Hedge of it.---A strong Au-
 “ tumnal Wind blew all the Ashen keys
 “ about her Garden ; so that, in the Spring,
 “ ’twas metamorphos’d into a hopeful Plan-
 “ tation, with the Plants above Ground, as
 “ green as a Leek.---The Woman was re-
 “ ligious enough to cherish her new Proge-
 “ ny ; and however loth to lose her Gar-
 “ den, resolv’d, at last, to let them grow.
 “ ---She did it ; and, having such a promif-
 “ ing Nursery, became a Planter, and by
 “ selling Setts about the Country, obtained a
 “ very handsome, and enlarg’d Livelyhood.”-

Page 170.

The same Author, speaking of Clover,
Page 186, says, that “ what stands you the
 “ first Year, in twenty or five and twenty
 “ Shillings an Acre, and, after That, in
 “ not above Ten. Shillings a Year, *which he*
 “ *supposes the Rent of the Land,* will produce
 “ Six, Eight, or Ten, nay Twelve Pound
 “ per Annum for every Acre. *And speaking*
 “ *of Orchards, he says, I know many grow-*
 “ ing upon Land, that was not worth Six
 “ Shillings an Acre when they began the
 “ Work ; and *That* some Thousands of
 “ Acres,

“ Acres, too ; which Land is, now, brought
 “ to that Improvement, that they make
 “ twenty Pounds an Acre ; nay, if I should
 “ say forty, or fifty Pounds, I shou’d find
 “ sufficient Testimony for the Truth of it.”

Page 166.

Mr. *Mortimer*, a very ingenious Gentleman, as appears by his Writings, some few Years since, publish’d a Treatise on our Subject, dedicated to the *Royal Society*, of which he was himself a Member, wherein he gives Evidence for us, in these Words.

“ Tho’ Agriculture is what some may
 “ have a slight Opinion of, yet, ’tis one of
 “ those Arts, to the Teachers whereof Dr.
 “ *Spratt*, now *Bishop of Rochester*, says, the
 “ Antients paid the Diviner sort of Honour :
 “ And tho’ the Zeal, by which they express’d their Gratitude, to such Benefactors, degenerated into Superstition, yet has
 “ it taught us, that a higher Degree of Reputation is due to the Discoverers of profitable Arts, than to the Teachers of speculative Doctrines, or, to Conquerors Themselves. But I need say little, either of the
 “ Antiquity, or Usefulness of Husbandry,
 “ since

“ since so many great, and learned Men
 “ have thought it worth their Study, and
 “ Commendation. And that the Advan-
 “ tages of it reach all Parts, and Persons, in
 “ the World ; so that there can be Nothing
 “ more universally good, nor, consequently,
 “ better deserve your honourable Protection.”

Mortimer's Art of Husbandry.

*In Page the 97th of this Author's Book we
 are told, that, “ in Cumberland, a small Par-
 “ cel of Ground, of two Acres and a half,
 “ is lett for Eleven Pound per Annum ; and
 “ that the emptying the Town Tan-pits on
 “ it, is the only means, by which it has
 “ been rais'd to that value.”*

*One Mr. John Edmunds, of Bowden in Che-
 shire, has given the following Account of im-
 proving his Ground by Sand only;---His
 Land, he says, was “ marsh Land, very flat,
 “ and full of Rushes ; of a black, deep
 “ Mould, such, as they dig Turf in : Upon
 “ which Land he laid after the Rate of 300
 “ Load of Sand upon an Acre :---The sand
 “ was red, hot, and of a small Grain ; He
 “ sow'd it, first, with Oats, and Fitches,
 “ and had an extraordinary Crop : The next
 “ Winter*

“ Winter he dung’d it well, and had, the
 “ Summer after, fourteen Loads of Hay up-
 “ on an Acre.---”Tis now, he fays, twenty
 “ four Years since he fanded it, and he has
 “ not dung’d it fince; And the Land, that
 “ before was not worth ten Shillings an Acre,
 “ He can now let for Six Pound, and cou’d
 “ have two Crops upon it every Year, if he
 “ cou’d be fure of fair Weather to make it
 “ in.” *Mort. of Husbandry, Vol. 2d. P. 17.*

*Liebault, the Author of a French Folio, en-
 titled The Country Farm, addreffing himfelf to
 the Prince of Soyons, tells him---*“ among all
 “ the Sciences, which Man can poffibly at-
 “ tain, by Practice, or by Speculation, there
 “ is none fo elevated, or fo ravifhing to hu-
 “ man Senfe, as That of Husbandry: Nei-
 “ ther is there any Study, fo delightful, fo
 “ profitable, or fo neceffary for the very well-
 “ being of Mankind in general.”

“ There is nothing wanting, fays Mr. Ga-
 “ briel Platt, in an excellent Tract, which he
 “ calls, *A Discovery of hidden Treasure*, but
 “ willing Minds, to make this Country the
 “ Paradife of the World.---If Gentlemen of
 “ Quality would but lay the firft Stone, All
 wou’d

“ wou’d follow without Question : For *Gain*,
 “ the Loadstone of the World, being once
 “ laid open by Practice, wou’d *draw* the
 “ Rest, infallibly.---There is no Cause, that
 “ I know of, for their being slack in it.
 “ There are a great number of Parishes with-
 “ in my Knowledge ; and, without Ques-
 “ tion, infinitely more, that I know not,
 “ where a Landlord, by laying out a very
 “ little Money, upon his Estate, may gain
 “ as much again, as he wou’d by purchasing
 “ new Lands, tho’ the Purchase-Money
 “ were to be given him. And this Business
 “ is not to be slightly thought upon, for as
 “ much as Husbandry is the very Nerve, or
 “ Sinew, that holds together all the Joints of
 “ a Monarchy.”

The same Author, Page 32.---“ I have
 “ known, in *England*, Hay Ground im-
 “ prov’d, by this means, from ten Shillings,
 “ to above ten Pound an Acre.---*Again.*---I
 “ know a Man, not far from *London*, who,
 “ by laying out three hundred Shillings, im-
 “ prov’d his Estate three hundred Pounds a
 “ Year”.

In another Place, Page 63.---“Whereby
 “ it appears of what high Consequence Hus-
 “ bandry is in a Nation; viz. the very Legs,
 “ and Pillars of it, without which it cannot
 “ stand; no, not by any Device, or Policy
 “ whatsoever.---And, therefore, I wou’d
 “ have every Well-wisher to the Publick
 “ Good, be diligent in the furtherance of it:
 “ And read *Mr. Markham, Googe, Tuffer,*
 “ *Sir Hugh Platt*, and others, who have
 “ manifested their good will, by publishing
 “ their Knowledge in this Behalf: I wou’d
 “ desire, that no Man may think much of
 “ his Labour, but try Experiments of this
 “ Nature, whose Effect *must* prove beneficial
 “ to all present, and future.---But, if any
 “ Man be wilfully negligent in this Duty,
 “ he manifests his Unworthiness to all Poste-
 “ rity.---Admit he be accounted a conceited
 “ Fellow, or One, that runs out of the com-
 “ mon Way; yet, in Regard the common
 “ Way leads to Perdition, let him not desist
 “ for a few frivolous Aspersions: For, when
 “ Light and Truth shall appear in the
 “ World, his Worth shall shine out, beyond
 “ a Possibility of being eclips’d, by the
 “ Tongues

“ Tongues of conceited Fools, and idle
 “ Coxcombs.”

A little further, he adds---“ I wish, that
 “ They, who love not to try Experiments,
 “ may take their Ease, and will lay no hea-
 “ vier Task upon them, than to wish well
 “ to others; only, I wou’d desire them to
 “ consider, what a wretched Case They had
 “ themselves been in, if some more inven-
 “ tive Brains had not found out the *Plow*,
 “ and the Use thereof: As also, if some, of
 “ a like Disposition, had not discover’d new
 “ ways for the fructifying of Land, when its
 “ worn Condition refus’d Encrease, suffici-
 “ ent to sustain the numerous People.”

Discovery of hidden Treas. P. 86.

I happen’d just now to mention the *Royal Society*, Let us see the Opinion of one of its worthiest Members, the elaborate Mr. *Evelyn*, in his *Sylva*.

“ This Discourse, *says he*, was delivered
 “ to the *Royal Society*, in obedience to their
 “ Commands, and is only for the Encourage-
 “ ment of an Industry, and worthy Labour,
 “ too much, in our Days, neglected; as hap-
 “ ly reputed a Consideration of too sordid,

“ and vulgar a Nature for noble Persons,
 “ and Gentlemen to busy themselves withal;
 “ and who oftner find ways to fell down,
 “ and destroy, than repair, or improve: But
 “ we are not without Hopes of taking off
 “ these Prejudices, and of reconciling them
 “ to a Subject, and an Industry, which has
 “ been consecrated, as I may say, by as good,
 “ and as great Persons, as any the World
 “ has produc’d; and whose Names we find
 “ mingled among Kings, and Philosophers,
 “ grave Senators, and Patriots of their Coun-
 “ try:---For such, of old, were *Solomon*,
 “ *Cyrus*, and *Numa*, *Licinius*, surnam’d *Sto-*
 “ *lo*, *Cato*, and *Cincinnatus*; the *Pisos*, *Fabii*,
 “ *Cicero*, the *Plinies*, and Thousands more,
 “ whom I might enumerate, who disdain’d
 “ not to cultivate these Rusticities, even with
 “ their own Hands; and to esteem it a great
 “ Accession, to dignify their Persons, and
 “ adorn their Purple, with these rural Cha-
 “ racters of their Affections to Planting, and
 “ Love of *Agriculture*; which has transmit-
 “ ted to us their venerable Names through so
 “ many Ages, and Vicissitudes of the World.
 “ That famous Answer alone, which the

D

“ *Persian*

“ *Persian* Monarch gave to *Lysander*, will
 “ sufficiently justify what I have said ; Be-
 “ sides That, which we might add out of
 “ the Writings, and Examples of the Rest.--
 “ But I hasten to advise Men not to commit
 “ themselves to the Dictates of their ignorant
 “ Servants, who are, generally speaking, far
 “ fitter to learn, than instruct others.---*Male*
 “ *agitur cum Domino, quem Villicus docet,*
 “ was an old Observation of *Cato's* ; And *Is-*
 “ *chomachus* told *Socrates*, that it was far ea-
 “ sier to *make*, than to *find* a good Husband-
 “ man.---I have often prov'd it so, in *Gar-*
 “ *deners* ; and, I believe, it will hold in most
 “ of our Country Employments : We are
 “ to exact Labour from *them*, not Conduct,
 “ and Reason : This Business is a *Science*,
 “ and beyond the Reach of their shallow Ca-
 “ pacities ; on the contrary, as the *Orator*
 “ has express'd it, there is nothing more be-
 “ coming, or more worthy of a *Gentleman*.
 “ ---The true Reason, *says Palissy*, a *French*
 “ Writer, why Husbandry is no more im-
 “ prov'd in this Age of ours, is, that, when
 “ Men have acquir'd any considerable For-
 “ tune, by their good Husbandry, and Expe-
 “ rience,

“ rience, forgetting that the greatest Patri-
 “ archs, Princes, their Sons, and their
 “ Daughters, belong’d to the Plow, and the
 “ Flock, they account it a shame to breed
 “ up their Children in the same Calling, to
 “ which themselves were educated ; They
 “ must be presently made Gentlemen ; They
 “ must, forsooth, have a Coat of Arms, and
 “ live upon the Rents of their Estates ; so
 “ as by that Time his Beard grows, he be-
 “ gins to be asham’d of his Father, and is
 “ ready to defy the Man, who, at any Time-
 “ reminds him of his honest Extraction : If it
 “ chance, the good Man has other Children to
 “ provide for, *This* must be the Darling ; be
 “ bred at School, and University, while All
 “ the rest must to Plow with their Father.
 “ ---This is the Cause, that our Lands are
 “ so ill cultivated : Every body will subsist
 “ upon their own Revenue, and take their
 “ Pleasure, while their Estates are resign’d
 “ to the Management of the most ignorant ;
 “ which are, either the Children kept at
 “ home, as I said before, without Learning
 “ or Experience ; or *Hinds*, if possible, more
 “ ignorant than They ; when, as in Truth,

“ and Reason, the more Learning, the better
 “ Philosophers, and the greater Abilities they
 “ possess, the more, and the better are they
 “ qualify’d, to cultivate, and improve their
 “ Estates.”

The same Author, Page 219.---“ Whatso-
 “ ever is propos’d to our Husbandmen, above
 “ their usual Course, is look’d upon, as the
 “ Whim, and Fancy, of speculative Persons,
 “ which they turn into *Ridicule*, when ap-
 “ plied to Action : and this, says an ingenious
 “ and excellent Husband, might be the Reason,
 “ why the prime Writers of all Ages, endea-
 “ vour’d to involve their Discourses with Al-
 “ legories, and enigmatical Terms, to pro-
 “ tect them from the Contempt, and Pollu-
 “ tion of the Vulgar ; which has been of
 “ some ill Consequence in Husbandry, and
 “ made the fewer Writers adventure upon so
 “ plain a Subject, though, doubtless, to any
 “ considering Person, the most delightful
 “ Kind of natural Philosophy ; and that
 “ which employs the most useful Part of the
 “ *Mathematicks*.”

*A little further, you have a Specimen of the
 Profits of the Art, in one of its Branches,
 Planting*

Planting only.---“ Even this Improvement,
 “ *says he, speaking of one foregoing,* does no
 “ Way reach what I have met withal, in the
 “ most accurate, and no less laborious Calcu-
 “ lation of Capt. *Smith*, upon this very *To-*
 “ *pic* ; where he demonstratively asserts, that
 “ a thousand Acres of Land, planted at one
 “ foot Interval, in seven thousand two hun-
 “ dred and one Rows, taking up fifty one
 “ million, eight hundred, and fifty four
 “ thousand, four hundred, and one Plants of
 “ *Oak, Ash, and Chesnut*, and fit to be trans-
 “ planted at Three years End, are then worth
 “ Eighteen Pence a hundred, besides the
 “ Chesnuts, which, being a Third of the
 “ whole, and worth half a Crown a hun-
 “ dred, the Three years Profit of one Thou-
 “ sand Acres, amounts to forty seven thou-
 “ sand, five hundred, and thirty three
 “ Pounds, four Shillings.” *Sylva, Page 221.*

*Will you bear the Sentiments of an honest
 Surveyor, whose Business made him the more
 capable of observing the universal Ignorance of
 Agriculture, which reigns among us ?---“ We
 “ have, indeed, says he, a kind of plodding,
 “ and common Course of Husbandry, and a*

“ kind of peevish Imitation of the *most*,
 “ who, as wise Men note, are always the
 “ *worst* Husbands ; and who only try what
 “ the Earth will do itself, and endeavour
 “ not to help her, by the means which Na-
 “ ture has provided ; whereas, if Men were
 “ but a little careful, and industrious, the
 “ Earth wou’d always yield above a hundred
 “ per Cent. Reward for a good Husband’s
 “ Charges, without the Curses of corroding
 “ Usury.” *Surveyor’s Dialogue, P. 223.*

The next Witness shall be Mr. GOOGE---

“ Do you wonder, *says he*, to see me delight
 “ myself in the Raptures of so honest, so
 “ profitable a Life, as that of a Husband-
 “ man. Do you not know, that, in the
 “ Judgment of the holiest, and wisest Men,
 “ there is nothing more eligible, nothing
 “ more illustrious ? Neither is there any Life
 “ besides, so fit for a Gentleman, nor any
 “ other Profession so acceptable to God.---
 “ The Antients, I appeal to *Cato*, when they
 “ wou’d raise Commendation to its highest
 “ Pitch, wou’d call a Man *Good Husband*, as
 “ comprehending, in That Name, the ut-
 “ most Praise they cou’d give him.”

Googe of Husbandry, P. 5.
Again.

Again. “ The only Gentlemanlike way
 “ of growing rich, is, by the Art of Hus-
 “ bandry : All other Professions have some-
 “ thing in them of the *mean*, and *subservi-*
 “ *ent* : This alone is free, and noble ; and
 “ the Wealth thus gotten may almost be
 “ said to be of a Man’s own *creating*.---
 “ Country People were, in all Ages, pre-
 “ ferr’d before the Inhabitants of Cities, as
 “ having more Nobility affix’d to their Prac-
 “ tice, than such as, living securely within
 “ Walls, were safe, and idle under the Sha-
 “ dow of a Pent-house.---How much less
 “ noble is the Man, who sells his Blood,
 “ not for the Service, but the *Pay* of his
 “ Country ! and how far below the Coun-
 “ tryman must He be plac’d, who bawls at
 “ every Bar for Gain ! and holds out his
 “ Hand to every Bidder !” *Page 8th.*

Mr. *Gabriel Platt*, in a *Letter to Mr. Sa-*
muel Hartlibb, which is printed in a *Dis-*
course on this Subject, observes, *That*---“ it is
 “ found by Experience, that where a good
 “ Council of War is, there a Camp is well
 “ defended ; and where a good *Physician*,
 “ the Diseases of human Body are less fatal.

“ ---Why shou’d it not be so in Husbandry ?
 “ *says he.*---And does not that Art deserve
 “ an *Academy*, upon which the Happiness of
 “ all Kingdoms does depend ? Surely, if a
 “ certain Number of the most experienc’d
 “ Men were deputed for this Purpose, who
 “ might regulate the rest, it wou’d produce
 “ a great Perfection in that Knowledge,
 “ which, as it is the most antient of all Sci-
 “ ences, so it is the most excellent, and ho-
 “ nourable ; for by it all Princes live ; and
 “ no Man can possibly live without it.---The
 “ Rabble are like those in *Ireland*, who will
 “ not lay aside their old Custom of drawing
 “ Horses by their Tails, tho’ a solemn Law
 “ be made against it.---I have known some
 “ Parsons of Parishes pretty skilful in Agri-
 “ culture, and excellent Improvers of Land :
 “ And I have, now and then, met with a
 “ *Landlord* qualified with the same Skill :
 “ And certainly, if All were so, it wou’d
 “ conduce greatly to the Prosperity of a King-
 “ dom, tho’ the chief Profit wou’d redound
 “ to the two particular Ranks of Men, above-
 “ nam’d. I have known many Men live
 “ better

“ better with thirty Acres of Land, than
 “ others cou’d upon a hundred; and, if
 “ need require, I can shew, where *One* Acre
 “ of Land is worth two hundred Pound a
 “ Year, and a whole Family has not only
 “ liv’d well, but gather’d a good round Sum
 “ out of it.”

Annotations on the Legacy, P. 205, 206.

*A Discourse, which was printed soon after
 the Restoration, under the Name of MERCU-
 RIUS LÆTIFICANS, has, among other Obser-
 vations, this Hint towards our Subject:—*
 “ Let all Men be pleas’d to take into serious
 “ Consideration that, as in every Century of
 “ Years, there do more Men die than are in
 “ the World, at any one Time; so also, in
 “ every Century, there is more Wealth lost
 “ to the Nation, for want of a compleat
 “ Knowledge in the Art of Agriculture, than
 “ there is in the Kingdom, at any one Time,
 “ though an Inventory were taken at *Mi-
 “ chaelmas*, when the whole Year’s Fruits are
 “ engross’d together; and yet such an Inven-
 “ tory will much more than double ano-
 “ ther, which shou’d be taken, at *May day*,
 “ when the old Fruits are almost wasted,
 “ and

“ and little remains, but *Hopes*; which are
 “ not usually put into Inventories.”

A Complaint, of our particular Deficiencies, in this Art, which bears the Name of MR. CRESSY DIMOCK, after having recommended to the Husbandmen several Practices, which are still un introduc'd among us, reproves the general Backwardness he met with, in this manner.

“ But some will object, that they will not
 “ grow here with us: Our Forefathers never
 “ us'd them. To those I reply, and ask
 “ them, how do they know? have they
 “ try'd?---Idleness never wants an Excuse:
 “ And why might not our Ancestors, upon
 “ the same Ground, have held their Hands
 “ in their Pockets, and presum'd, that
 “ Wheat, and Barley wou'd not have grown
 “ amongst us? or, why shou'd they not
 “ have been discourag'd from planting *Cher-*
 “ *ries, Hops, Liquorice, Potatoes, Apricots,*
 “ *and Peaches?* And from sowing *Rape-*
 “ *seed, Colliflowers, Great Clover, Canary-*
 “ *seeds,* and many more of this Kind? And
 “ yet we know, that some of these have
 “ been

“ been introduc’d, and most of them brought
 “ to Perfection, even in our Days.”

*Will you have another Example of what
 Land is capable of doing ?---*“ A Friend of
 “ mine, *says Mr. Platt*, about *Michaelmas*,
 “ plow’d up twenty Acres of Grass Ground :
 “ He afterwards cross-plow’d it, and harrow’d
 “ it three or four times, to kill the Grass,
 “ and mingle the fat Earth with the lean ; He
 “ sow’d it, about the Beginning of *March*,
 “ with Barley, which before the vehement
 “ Drought came, had, as it were, turf’d
 “ the Ground with its Spires, it came up so
 “ thick : So that the Drought, which
 “ spoil’d the thin, and common Corn in the
 “ barren Fields, cou’d only shorten the Stalk
 “ of this Barley ; while the rich Earth put
 “ forth a large, and thick Ear, with plump,
 “ and round Grain ; by which means it
 “ came to pass, that he had, upon every
 “ Acre, thirty Quarters of Barley ; and,
 “ the Price being rais’d that Year by the
 “ Drought abovemention’d, he sold it off
 “ for forty Shillings a Quarter ; and, in the
 “ Face of a thousand unbelieving Ignorants,
 “ receiv’d

“ receiv’d twelve hundred Pounds for twenty
 “ Acres of Barley.” *Annotations, Page 187.*

*You will wonder to hear of such a Harvest :
 Let the same Author plead his own Cause ; and
 indeed, he is very able to do it.---*“ If any
 “ Man, *says he*, asks, why this great Im-
 “ provement of our Lands is hardly follow-
 “ ed by any one Man in the Nation ? The
 “ Answer is very easy.---Few there are,
 “ who understand these ways, and fewer far
 “ will give themselves the Trouble of think-
 “ ing to the Purpose : All Men are, from
 “ their Youth, brought up to Idleness, or
 “ Business : If to Idleness, who can expect
 “ a good Effect from so bad a Cause ? And,
 “ if to Business, they are so fix’d, so rivetted
 “ in their particular Way, before they become
 “ Masters of a Discretion capable of chu-
 “ sing, that they cannot wind themselves out
 “ of those former Engagements, which af-
 “ ford them a *certain* little Profit, for an *un-*
 “ *certain* great One : At least for One,
 “ which they imagine not *so* certain, as their
 “ own : Besides, Men are commonly pos-
 “ sessed with a sturdy Dislike of any Propo-
 “ sition, which, to set them *right*, must first
 “ convince

“ convince them, that their former Measures
 “ have been *wrong*.” *Annotations*, P. 278.

“ Some, *says the same Gentleman, in ano-*
 “ *ther Place*, may object, that if this Art,
 “ Trade, or Profession of Husbandry were,
 “ indeed, so profitable, as you pretend, why
 “ do we not then see more *rich* Men of that
 “ sort? And why do so many Farmers live
 “ so poorly, and so beggarly, that one might
 “ as well take them for their Landlord’s
 “ *Slaves*, as for his *Tenants*? I answer,
 “ that this Presumption is, in itself, a down-
 “ right Mistake; for there are, many times
 “ over, more Estates acquir’d, by what you
 “ call plain *Farming*, than by any other Pro-
 “ fession in the Nation: Nay, the best, and
 “ noblest Families amongst us have been
 “ rais’d by the *Plow*: And there are, at this
 “ Time, Multitudes of *Graziers*, *Sheep-mas-*
 “ *ters*, and *Corn-masters*, who, by their per-
 “ sonal Industry, in this Art, have acquir’d
 “ such vast Estates, that, were the Worth of
 “ Mankind to be disputed, by the Weight of
 “ their Bags, They cou’d produce their *Thou-*
 “ *sands*, and their *Ten thousands*, in as for-
 “ midable

“ midable Array, as if they had been us’d to
 “ appear at the Head of our City Militia.

· “ But, allowing the Position *just*, it touch-
 “ es not the *Art*; The Fault is in the *Pro-*
 “ *fessor*, not the *Profession*: Our *Farmers*
 “ (for to call them *Husbandmen*, were to flat-
 “ ter them with a Title they have no Pre-
 “ tence to) have only certain, general, rude,
 “ imperfect, and irrational Rules, or Cus-
 “ toms rather, which their Forefathers, just
 “ as wise as They, have left them; and from
 “ which, like a dull Ass, who is so fond of
 “ his natural Pace, they can never be driven:
 “ Nay, they are so ridiculously averse to all
 “ *new* Practices, that ’tis a meer Impossibi-
 “ lity to infuse any such Thing into their
 “ Heads; no, not by manifest Example un-
 “ der their very Noses.---The Stubbornness
 “ of these Men’s Natures is easily discover’d
 “ by any Man, who will but propose some
 “ means, to turn their *barren Land* into
 “ *fruitful*, or prevent the *Rot* among their
 “ *Sheep*, or *Murrain* among their *Cattle*.
 “ He will not only see his Motion utterly re-
 “ jected, but Himself derided, and privately
 “ scoffed at: But Ignorance was, never yet,
 “ a wise

“ a wise Man’s Ruler.---Be not easily diverted
 “ from experiencing the Truth, and be as-
 “ sur’d, that He, who, having any tolerable
 “ Stock to begin with, does first inform him-
 “ self with Care, and then proceed with Re-
 “ solution, cannot fail to be as rich, as he
 “ desires; and *that* with an Honesty, the
 “ Consciousness whereof will add a Relish to
 “ his Pleasures.” *Page 265, 266.*

In the Papers, which were publish’d by
 Mr. HOUGHTON, a Fellow of the ROYAL
 SOCIETY, under the Title of *Letters for the*
Improvement of Husbandry, and Trade, we
 have much matter for our Purpose, of which
 I will only give you a few Particulars.---In
Volume the 1st. Page 16, we have the follow-
 ing Letter.

“ S I R,

“ I am very glad, you have undertaken
 “ this Task, and question not but, in a little
 “ Time, the Kingdom will have Reason to
 “ thank you.---For my Part, I do; as well
 “ foreseeing the Advantages, which must
 “ attend it.---In Answer to your Inquiries
 “ about *Meadow, Number 4*, I’ll tell you
 “ what Success I had by *Clover*.

“ I have

“ I have a Piece of Land, that us’d to be
 “ reckon’d eight Acres ; it was a common
 “ Field, and usually lett, by my Predecessor,
 “ for Three Pound a Year. This I enclos’d
 “ two Sides of, the other two Sides lying to
 “ other Enclosure, and being done to my
 “ Hand.---I made a Ditch five Foot deep,
 “ and six or seven Foot broad ; the Earth,
 “ that was thrown up, I carried off, and
 “ laid it on my Land, which both improv’d
 “ my Ground, and prevented the Rabble
 “ from taking the first Opportunity to fill up
 “ my Ditch again.---I prepar’d this Land, as
 “ is usually done for *Oats*, and *Clover-grass*,
 “ both which I sow’d, and all my Charge
 “ amounted to about seventeen Pound : And,
 “ *that Year*, I made above twenty Pound of
 “ it. Next Year, without any further
 “ Charge, it clear’d me forty Pounds,” &c.

“ Several of my Neighbours have found
 “ great Advantage by this, and several other
 “ new Husbandries, of which, hereafter, I
 “ may give you a particular Account: Inte-
 “ rim subscribe, &c.”

S I R,



“ S I R,

“ Since I have been acquainted with your
 “ excellent Design of promoting the Husban-
 “ dry of *England*, as much as in you lies,
 “ I’ll tell you what I met with, in a little
 “ Journey to *Theobalds*.

“ There is a considerable Gentleman, who
 “ has enclos’d a Piece of Ground, containing
 “ fix Acres : This he plow’d, and order’d as
 “ for Wheat ; and about *Midsummer*, sow’d
 “ it with *Cole-seed* : He had a hundred *Welsh*
 “ Ewes, which he wou’d have sold to the
 “ Butchers, but they wou’d give no more
 “ than half a Crown a piece for them.---
 “ Upon this, about the Beginning of *Novem-*
 “ *ber*, he put them into his *Coleworts* ; They
 “ happen’d All to cast their Lambs, before
 “ *Christmas* ; some a Month before.---The
 “ Coleworts fed the Ewes so well, that the
 “ Lambs were sold off, from eight to four-
 “ teen Shillings a piece.---When the Growth
 “ was eaten up clean, he sold the hundred
 “ Ewes for a hundred Crowns ; and then
 “ prepar’d his Land for *Oats* ; which he
 “ sow’d, and receiv’d, from each Acre,
 “ eight Quarters : And all This lost him no

E

“ more

“ more Time, than wou’d have been neces-
 “ fary for a Crop of *Wheat*.

“ This is no Romance, I had it from the
 “ Gentleman’s own Mouth, more than once,
 “ and his Neighbours all own it : I hope this
 “ Example will encourage others to the like
 “ Endeavours, and am, &c. *Houghton of*
Husbandry and Trade, Vol. I. P. 18.

Another Letter, sign’d ADAM MARTIN-
 DALE, gives the following Account of the
 Advantage, which certain Gentlemen, of
Cheshire, made by *Marling* of their barren
 Lands.

“ As to the *Profit*, I dare not tell Stran-
 “ gers what my Neighbours know to be true,
 “ it has sometimes been so extraordinary : I
 “ shall only *say*, that, if the Marl be good,
 “ and the Land proper for it, good Hus-
 “ bands affirm, that the Expence can hardly
 “ be too much. I know somewhat by my
 “ own Experience; But I can name divers
 “ of my Acquaintances, who have very
 “ considerably advanc’d themselves in the
 “ World, this way; And others, who, by
 “ this Means, have supported themselves,
 “ and their Families, from Ruin, whose Ef-
 “ tates

“ tates had been, otherwise, sunk, by their
 “ former Prodigalities.---*Vol 1st. P. 58.*

What follows is a Letter from Dr. *Plott*,
 Author of the *natural History of Oxford-*
shire, &c.

“ S I R,

“ I have perused your printed Collection
 “ of Letters, which you tell us, in your Pre-
 “ face to *Dr. B.* shall be frequently pub-
 “ lish'd ; whereof, I must confess, I am not
 “ a little glad : And it is my Opinion, that
 “ the maintaining a *Georgical*, and *trading*
 “ Correspondence,---The Publication of Let-
 “ ters, foreign, and domestick ;---And the
 “ Breviates of Books agreeable to such Mat-
 “ ters, will be a means to make *England*,
 “ not only the most delightful, but also the
 “ wealthiest Kingdom, the World is ac-
 “ quainted with.

“ I cannot, therefore, but applaud your
 “ Design :---Proceed, as the Countryman
 “ says, and prosper, in the name of God.---
 “ And, to satisfy you, that my good Wish-
 “ es, towards you herein, are cordial, I do
 “ hereby promise you my utmost Assistance

“ for the Publick Good ; *Agriculture*, I
 “ think, being the *least* improv’d, of all the
 “ Arts in the Kingdom, tho’ it *best* deserves
 “ it, as the most universal Beneficial.

“ For, whatever Husbandmen are apt to
 “ conceive of their Abilities, most of them
 “ believing, they have brought it to the
 “ highest Pitch, in their respective Countries ;
 “ And however forward they be in entertain-
 “ ing any thing new, tho’ never so Advan-
 “ tageous, besides what they have receiv’d
 “ from their Ancestors ;---Yet, I may be
 “ bold to Advertise them, that, were they
 “ really so knowing, as they pretend ; or,
 “ wou’d they but admit of such Notice, as
 “ might be communicated, and put them in
 “ Practice, we shou’d have no such Com-
 “ plaints of *uncertain Crops, Smuts, Mildews,*
 “ *Lodging of Corn, its being eaten up by Birds,*
 “ and the Loss of whole Crops, as now we
 “ frequently meet with.

“ But so *unskilful*, indeed, is the Husband-
 “ man, generally, in his own Affairs ; so *ig-*
 “ *norant*, in appropriating the Grain to the
 “ Soil, to *prevent* these Inconveniencies, that
 “ he knows not so much as the *Grains* them-
 “ selves,

“ selves, *fit* for these Purposes, though near
 “ Neighbours to him: It having been,
 “ sometimes, found, that the very Grain,
 “ sown in one Part of the same County,
 “ has not been so much as heard of, in ano-
 “ ther, tho’ preferable to all others of its
 “ Kind beyond Exception.---Witness a sort
 “ of *Wheat*, sown plentifully in the *Vale*;
 “ between *Thame*, and *Watlington*, in the
 “ County of *Oxford*, and call’d *mix’d Lam-*
 “ *mas*; It being a white-ear’d, red Wheat,
 “ which, tho’ bringing a more certain Crop,
 “ and yielding considerably better, than most
 “ other Wheats, yet, not long ago, was al-
 “ together unknown, about *Banbury*, and
 “ *Burford*, and, perhaps, remains so to this
 “ Day.

“ Much less are the Grains of *one* County
 “ known in *another*: Witness the sort of
 “ Wheat, call’d *red-stalk’d* Wheat, sown
 “ plentifully about *Oxford*, which, tho’ en-
 “ dued with the excellent Quality of seldom,
 “ or never *Smutting*; a conveniency, that
 “ best pleases the Chapman, of any, yet,
 “ either has not been heard of, or is wholly
 “ neglected, in most other Counties. Nor

“ less ignorant is the Husbandman of *Long-*
 “ *Cone* Wheat, notwithstanding its not being
 “ subject to Lodging, or being eaten by
 “ Birds, and its constant Freedom from that
 “ Epidemical Disease of Corn, commonly
 “ call’d the *Mildew* ; Three Inconveniencies,
 “ sometimes so fatal to him, that, by one,
 “ two, or all of them, he loses his Crop ;
 “ Whereas, had he known these Grains,
 “ and wou’d have taken the Pains to procure,
 “ and have us’d them, how free might he
 “ have been from all those Inconveniencies,
 “ where-ever his Grounds had been liable to
 “ them.

“ And, as it is in Wheat, so it is, like-
 “ wise, in Barley ; For I cannot hear, that
 “ *Patney*, or *Ratheripe* Barley, is sown any
 “ where, but, in *Wiltshire*, *Berkshire*, *Ox-*
 “ *fordshire*, and the most *western* Parts of
 “ *Cornwall* ; notwithstanding the Advantage
 “ of its being early Ripe ; It having, many
 “ times, been sown, and return’d to the
 “ Barn again, in two Months time ; always,
 “ in nine, or ten Weeks, at farthest, which
 “ is very considerable ; as well in wet, and
 “ backward Springs, and moist Autumns, as
 “ in

“ in great Drought, when other Counties,
 “ that sow Barley, lose their Seasons, and
 “ Crops, as they did, this very Year : For,
 “ not being able to sow their Barley, by rea-
 “ son of the great Drought, till after *Mid-*
 “ *summer*, it was green, at *Michaelmas*, as I
 “ saw in *Kent*, and some other Counties ;
 “ and, as I have Reason to believe, never
 “ came to be ripe at all ; whereas, had they
 “ but known, and us’d the *Patney* Barley,
 “ tho’ they sow’d it not till *July*, they
 “ might have had it in their Sacks again
 “ before *Michaelmas* ; it always coming to
 “ be ripe, in the worst of Summers.

“ Whence it plainly appears, that, cou’d
 “ you make yourself the happy Instrument
 “ of communicating such Notices, as these,
 “ to all the Parishes in *England*, and so ef-
 “ fectually, as to get them put in Practice ;
 “ for that is the greatest Work, though one
 “ would think, indeed, Men shou’d make
 “ but weak opposition against their own
 “ Emoluments, you wou’d, for ought I
 “ know, deserve as much from the *Publick*,
 “ as the Founder of *Christ’s Hospital*, and

“ all its Benefactors ; and receive the Accla-
 “ mations, and Applauses, of all good Men,
 “ as the just Reward of so great an At-
 “ chievement, which is all, at present, but
 “ that” &c. *R. Plott, P. 31, 32, 33, 34,*
35, Vol. 1st.

And now comes a worthy Knight, to join
 our Country *Chorus*, SIR JONAS MOOR,
 who, in a little Book, entitled, *England's*
Interest, &c. bids fair for proving, that an
 Acre of Land, in a few Years time, may
 be advanc'd to the yearly Worth of one hun-
 dred, and forty Pounds---His Words are
 these---

“ To deny, that Land is capable of Im-
 “ provement, is to contradict the Experience
 “ of the present, and former Ages ; and to
 “ deny a Truth, as obvious, as the Meridian
 “ Sun : For how many Acres of Land, in
 “ the Fen Countries, formerly no better than
 “ the *Irish Bogs*, are, now, by *draining*,
 “ and other Improvements, made as good
 “ Land, as any in *England*? And the same
 “ Improvement, that is made in the Fen
 “ Countries in one Respect may, in other
 “ Respects, be made in any other Country.
 ---“ And

“ ---And, therefore, that Land may be im-
 “ prov’d, is what, I presume, none will de-
 “ ny ; and, that it may be done to a far
 “ greater Advantage, than what has been
 “ hitherto practis’d, is what I am now to
 “ demonstrate. *P. 1st. and 2d.*

We have a remarkable Improvement re-
 lated in Dr. *Boat’s* Natural History of *Ire-*
land, in the following Words, *Page 97.*

“ How incredibly the Land was enrich’d,
 “ by this kind of Manuring, may be gather-
 “ ed by the ensuing Particular. The whole
 “ Lordship of *Mountrath* was, thirty Years
 “ ago, lett (by one Mr. *Downings*, who
 “ own’d it, and sold it afterwards to Sir
 “ *Charles Coot*) for fifty Pounds sterling, a
 “ Year ; and nevertheless, after a while,
 “ the Farmers surrender’d it to him, com-
 “ plaining, that they cou’d not live upon it,
 “ and that it had quite impoverish’d them.---
 “ Some time after, it was farm’d by People,
 “ who were newly come out of *England*,
 “ at a hundred and fifty Pounds a Year.---
 “ This Family, notwithstanding the tripled
 “ Rent, did not only live very handsomely
 “ upon it, but grew Rich, and Wealthy ;
 “ and

“ all its Benefactors ; and receive the Accla-
 “ mations, and Applauses, of all good Men,
 “ as the just Reward of so great an At-
 “ chievement, which is all, at present, but
 “ that” &c. *R. Plott, P. 31, 32, 33, 34,*
35, Vol. 1st.

And now comes a worthy Knight, to join
 our Country *Chorus*, SIR JONAS MOOR,
 who, in a little Book, entitled, *England's*
Interest, &c. bids fair for proving, that an
 Acre of Land, in a few Years time, may
 be advanc'd to the yearly Worth of one hun-
 dred, and forty Pounds---His Words are
 these---

“ To deny, that Land is capable of Im-
 “ provement, is to contradict the Experience
 “ of the present, and former Ages ; and to
 “ deny a Truth, as obvious, as the Meridian
 “ Sun : For how many Acres of Land, in
 “ the Fen Countries, formerly no better than
 “ the *Irish Bogs*, are, now, by *draining*,
 “ and other Improvements, made as good
 “ Land, as any in *England*? And the same
 “ Improvement, that is made in the Fen
 “ Countries in one Respect may, in other
 “ Respects, be made in any other Country.
 ---“ And

“ ---And, therefore, that Land may be im-
 “ prov’d, is what, I presume, none will de-
 “ ny ; and, that it may be done to a far
 “ greater Advantage, than what has been
 “ hitherto practis’d, is what I am now to
 “ demonstrate. *P. 1st. and 2d.*

We have a remarkable Improvement re-
 lated in Dr. *Boat’s* Natural History of *Ire-*
land, in the following Words, *Page 97.*

“ How incredibly the Land was enrich’d,
 “ by this kind of Manuring, may be gather-
 “ ed by the ensuing Particular. The whole
 “ Lordship of *Mountrath* was, thirty Years
 “ ago, lett (by one Mr. *Downings*, who
 “ own’d it, and sold it afterwards to Sir
 “ *Charles Coot*) for fifty Pounds sterling, a
 “ Year ; and nevertheless, after a while,
 “ the Farmers surrender’d it to him, com-
 “ plaining, that they cou’d not live upon it,
 “ and that it had quite impoverish’d them.---
 “ Some time after, it was farm’d by People,
 “ who were newly come out of *England*,
 “ at a hundred and fifty Pounds a Year.---
 “ This Family, notwithstanding the tripled
 “ Rent, did not only live very handsomely
 “ upon it, but grew Rich, and Wealthy ;
 “ and

“ and did so far improve the Land, that,
 “ when the last *Irish* Rebellion broke out,
 “ *That same Lordship* might have been let,
 “ for five hundred Pound sterling a Year,
 “ as I have been assured by several, who had
 “ themselves been Farmers of that very
 “ Land.

Hence it was, says Mr. *Nurse*, in a *Dis-*
*cours*e on the *Benefits, and Improvements of*
Husbandry, “ That the bravest Men, in the
 “ first Ages of the World, betook them-
 “ selves generally to Husbandry; which,
 “ however simple, and rude, it appear'd,
 “ was found very Advantageous, and De-
 “ lightful; insomuch, that the Poets of an-
 “ tient, and modern Times, when they
 “ wou'd describe the true Felicity of Man,
 “ and give their Fancies the largest Flights
 “ of Freedom, and Gaiety, borrow all their
 “ Descriptions from the Pastoral Life :--And
 “ even they, who give us Characters of great
 “ Generals, and Princes, in Heroic Strains,
 “ still represent them by Metaphors of this
 “ Nature. P. 5th.

“ As to the Profits, arising from a Coun-
 “ try Life, it is superfluous to enlarge upon
 “ that,

“ that, which is so obvious to all the
 “ World: And, first, in Respect of the ge-
 “ neral, or *Common-wealth*: This is the
 “ great Vein, by which the Blood is distri-
 “ buted through all, and every Part of the
 “ Body, or ’tis rather the very Blood itself,
 “ since it is diffus’d over the whole, nor
 “ can any Part, or Member subsist without
 “ it.---It is the Foundation of Traffick, and
 “ Commerce; for as much as all the Manu-
 “ factures, and Commodities, which we ex-
 “ port, or receive from foreign Parts, are
 “ but the Productions of the Earth, either
 “ at the first Hand, or the second.---*Corn,*
 “ *Wine, Oyl, Fruits, Cloth, Linnen,* or
 “ *Woollen, Silk,* all are the Offsprings of the
 “ Earth, cultivated by Art, and Ingenuity.

“ And, as the Husbandman is most neces-
 “ sary, in time of Peace, so is He, also, in
 “ the Days of War; since all the *Stores,* and
 “ *Magazines,* the *Arms,* the *Cloathing,* and
 “ the *Provisions* of the Field, are almost
 “ solely deriv’d from his Care, and Provi-
 “ dence. If we regard the particular Inte-
 “ rest of private Persons, it is no less obvi-
 “ ous, that nothing more Advances it, than

“ Husbandry: The many great Estates, and
 “ Fortunes, Men arrive at, this way, are a
 “ certain Proof of this Truth: And, if
 “ some miscarry, 'tis no Wonder, whether
 “ it be by their own ill Course of Life, Ig-
 “ norance, or Negligence; or, perhaps,
 “ from some sinister Accidents, from which
 “ no State, no Condition can be exempted;
 “ But, in the general, 'tis certain, that, con-
 “ sidering the vast numbers of Husbandmen,
 “ none make so sure a Fortune, as They do;
 “ and there are ten Bankrupt Tradesmen, or
 “ Merchants, for one Husbandman, through-
 “ out the Kingdom. *Page 11, 12, 13.*

“ 'Tis much to be wish'd, that the State
 “ wou'd afford some Encouragement to
 “ Husbandry, by exempting it; at least,
 “ by easing it, as to the publick Burthens;
 “ especially, for some Years, upon any new
 “ Undertaking, which shall be judg'd of a
 “ general Advantage: By this means, Men
 “ wou'd venture upon *Projection*.---'Tis ve-
 “ ry well observ'd by a most ingenious, and
 “ learned Gentleman, in his Remarks upon
 “ one of the greatest, most antient, and most
 “ polished Governments upon Earth, when
 “ he

“ he tells us, That *Agriculture* is encourag’d
 “ by so many special Privileges from the
 “ Crown, and the Common Laws, and Cus-
 “ toms of the Country, that, whatever Wars
 “ happen, the Tillers of the Ground are
 “ untouch’d, as if they were sacred, like
 “ the Priests in other Places ; so that no
 “ Country in the World was ever known to
 “ be so well Cultivated, as the whole King-
 “ dom of *China*.---Whereas, with us, and
 “ other neighbouring Countries, ’tis the poor
 “ Husbandman, who must support, in a
 “ manner, the whole Expence of a War, &c.
 “ In fine, what I have written on this
 “ Subject is not grounded on the Reports,
 “ and Methods of other Authors, but upon
 “ my own observations, in a long, and hap-
 “ py Country Life.

P. 24.

Hear, next, Mr. ATWELL, in his faithful
Surveyor.

“ This I have seen in a dry Year, in a
 “ Meadow, near *Hartford*.---A Man, who
 “ had a Piece of Ground within the Com-
 “ mand of Water, flow’d it, and, by that
 “ means, made five Pound an Acre of his
 “ first Crop ; when his Neighbours in better
 “ Ground,

“ Ground, cou’d scarce make twenty Shil-
 “ lings. *Faithful Surveyor, P. 87.*

“ I have, in a wet Year, sown *Pigeons*
 “ *Dung* by Hand, upon my sandy Grounds,
 “ when my Crop has been sold for more
 “ than the whole Worth, or Fee-simple of
 “ the Land, it grew upon.

“ It is almost incredible, the odds of an
 “ Acre of Barley, in *Hitching Parish*, fifty
 “ Years ago, and twenty Years ago; and
 “ all, by the use of *Raggs*, and *Horn-Sha-*
 “ *vings*. --They have so mended their Soil
 “ by it, that, whereas, about fifty Years
 “ ago, an Acre of their Barley was not
 “ above three Pound ten, or four Pound,
 “ the Best.---Now, about twenty Years ago,
 “ I was requested to measure two Acres of
 “ Barley, in a Field, call’d *Kings Field*, in
 “ *Hitching Parish*, the Crop of which was
 “ sold for nine Pound an Acre, by the Statute
 “ Pole.” *Faithful Surveyor, P. 106, 107.*

MARKHAM comes next, and informs us,
 who a Professor of this Art is.---“ A *Hus-*
 “ *bandman* is one, who, with Order, and
 “ with Judgment, tills the Ground in pro-
 “ per Seasons; forcing it to produce whatever
 “ is

“ is necessary for the sustenance of Man.---
 “ This is He, to whom God, in the Scrip-
 “ tures, gives so many Blessings : This is
 “ He, whose Labours are, of all others, the
 “ most excellent ; and, therefore, to be a
 “ Husbandman, is to be a good Man.---A
 “ Husbandman, may, of all Mankind, be
 “ most properly call'd *Lord* of the Earth,
 “ for he commands, and governs it, in the
 “ most absolute manner.---He says to Bar-
 “ renness, *be* thou fruitful, and encrease ;
 “ and Barrenness obeys, and brings forth
 “ Plenty.---It is to him we owe the Bread,
 “ we live upon : All Ranks, all Callings,
 “ are dependant on him, and upon his good,
 “ or ill Success, hangs the Fortune of their
 “ Labours.---The *necessity* of this noble Art
 “ may be inferr'd from its *Profit* : For,
 “ since Profit is not only most universally
 “ aim'd at, but universally requisite, This,
 “ of all Arts, is certainly most necessary,
 “ because its Profit does so very far exceed all
 “ other.---But I wou'd have Men know,
 “ that the Name of *Husbandman* is no way
 “ due to the *Clown*, the *Peasant*, or the
 “ *Plowman* ;

“ *Plowman* ;---No----He is a Creature of
 “ another Mould : No Son of *Adam*, from
 “ the *Cottage*, to the *Crown*, how excellent
 “ foever, if he is excellent indeed, can pos-
 “ sibly assume a *richer*, *better*, or a *greater*
 “ Title, than that of *Husbandman*.” *Eng.*
Husb. P. 3, 4, 5.

AUSTIN, of *Planting*, observes, “-- There
 “ are many good Wits exercised about Toys,
 “ and Trifles, and who bestow excessive
 “ Time, Cost, and Labour about meer
 “ Shadows ; How much might These ad-
 “ vantage themselves, and others, in search-
 “ ing out a thousand hidden Secrets of Na-
 “ ture, by the Study, and Practice of *Agri-*
 “ *culture*. Not He, says an antient Author,
 “ who knows *many* Things, but He, who
 “ knows *profitable* Things, is wise.

“ This Art is a mighty *Store-house* of
 “ Meat, Drink, and Money ; 'Tis a rich
 “ *Mine*, out of which we may dig Profit,
 “ and Pleasure, without fear of ever com-
 “ ing to the Bottom : Nay, if you will, 'tis
 “ the *Philosopher's Stone*, which turns Trees,
 “ Fruits, Earth, Iron, and Water, into
 “ Gold, without the smallest Hazard : The

“ Excellence of this Employment, both in
 “ the Practice, and the Theory, extends it-
 “ self to every Place, and Person, in the
 “ World; from the Cradle to the Grave,
 “ and from the Beginning of the World to
 “ the very End thereof.---Nothing can be
 “ so universally good, as This.

“ It is much easier to prevail with People
 “ by *Examples*, than by *Precepts*, or *Rules*;
 “ and, if Examples of Great Men, even in
 “ wicked Things, are so powerful with most
 “ People, how much more prevalent shou’d
 “ they be in the honest, and the virtuous?
 “ We have a twofold Argument, concur-
 “ ring to excite the Practice of Agriculture:
 “ *Precedents*, and those of the highest, even
 “ *Kings, Emperors, and Philosophers*; And
 “ *Virtue*, the highest, which any secular
 “ Profession is capable of containing.

“ If, *says a Writer*, the Dignity of Hus-
 “ bandry may be drawn from the worth of
 “ such as have been Husbandmen, then it
 “ is a Kingly Art, and chiefest of all others.
 “ ---*Kings, Princes, Roman Emperors*, and
 “ the highest Powers on Earth, have not
 “ disdain’d to perform this Work with their

“ own Hands, and taken great Delight
“ therein.” Page 20.

“ This is an Age,” *says another Author,*
WORLDIDGE, *in Laudem Agriculturae,*
“ wherein to commend, or extol an ingeni-
“ ous Art, or Science, might be esteem’d a
“ needless Labour, but that we find the
“ more noble and worthy a Profession is, the
“ stronger Arguments are fram’d against it ;
“ and more particularly against this rustick
“ Art, and its infinite Preheminencies to any
“ other, by the Vainer, and Pedantic sort of
“ People, who despise the Value of every
“ Thing, they are ignorant of ; and judge
“ it below their Reputation, to take Notice
“ of so mean a Profession.---This makes me
“ tread in the Steps of more worthy Au-
“ thors, not to court the Credit of the *Ob-*
“ *stinate*, but to confirm the *Doubtful*, of
“ the Excellence, and inestimable Value of
“ this Art ; not only for the Health of our
“ Bodies, but the Encrease of our Fortunes,
“ and our universal Use, Pleasure, and Ad-
“ vantage. Those, who are conversant with
“ the Works of antient Writers, need not be
“ inform’d how many wise, and mighty
“ Men,

" Men, were Tillers of the Earth.--The
 " Study of *Agriculture* was of such high
 " Esteem, that *Monarchs* themselves have
 " not only labour'd *in it*, but acquir'd a
 " lasting, and immortal Name, by their
 " Writings of *it*.---*Xenophon*, in his Tract
 " of *Oeconomics*, tells us, nothing can be of
 " a more regal Estimation, and Splendor,
 " than judicious Agriculture.---*Pliny* writes,
 " that the Romans had so high an Esteem
 " for Agriculture, that they extended their
 " Laws to their Reformation of its Abuses.

" 'Tis evident, that this Art requires far
 " less Charge, and Expence, than Labour,
 " and Industry; And, to possess Men with
 " this, and encourage them to it, is the
 " scope of all its Writers, both antient, and
 " modern.---How much more Praise-worthy
 " is the Practice of this, than to spend our
 " Time in trifling and insignificant Studies.
 " It cannot be thought, that such wise, and
 " learned Men, wou'd so profusely scatter
 " Praises, for which they had not great, and
 " solid Reasons: Not to speak of the delight-
 " ful Entertainments, which a Country Life
 " abounds with, what Art cou'd possibly

“ subsist without it ? This is the indulgent Mo-
 “ ther, by whose Milk the World is nou-
 “ rish’d : Our Labour, and our Charges, here,
 “ return upon us with a manifold Encrease
 “ of Advantage.---The Romans, when they
 “ gave Names to their Tribes, distinguish’d
 “ the chief, among them, by the Name of
 “ *Rustic*, and the meaner, in Degree, were
 “ call’d the *Urbane*.

“ *Numa Pompilius*, to encourage Agri-
 “ culture, commanded the Fields to be di-
 “ vided into a certain number of Villages,
 “ over each of which he constituted a Su-
 “ pervisor ; whose Office it was to observe,
 “ who till’d his Land industriously, and who
 “ neglected it. He often sent for the dili-
 “ gent Husbandman, and, having courte-
 “ ously receiv’d him, wou’d dismiss him with
 “ Rewards.---As, on the contrary, he wou’d
 “ rebuke the Ignorant and Slothful. Thus
 “ some, for fear of Disgrace, and others,
 “ in Hopes of Reward, were continually
 “ intent on their Affairs : The like Examples
 “ we find in several Countries, *Spain, Hol-*
 “ *land, Germany, Venice.*---In *Burgundy*,
 “ they must not fell a Tree, till they have
 “ planted

“ planted another near it.--- And, in several
 “ Places of *Germany*, about *Hainault*, and
 “ *Frankfort*, no young Farmer is permitted
 “ to Marry, till he has planted such a stated
 “ Number of Walnut Trees.--- We have, in
 “ *England*, many good Laws to this Purpose,
 “ but none so slighted, and neglected, as
 “ *they*. But our Hopes, and Expectations
 “ are now great, that something will be
 “ done herein ; seeing That *Royal*, and most
 “ excellent *Society*, at *Gresham College*,
 “ make it the principal Object of their Stu-
 “ dies, and Care.

“ *Maximus Tyrius*, a most grave Philoso-
 “ pher, compos'd a Dialogue, wherein, by
 “ many, and convincing Reasons, he de-
 “ monstrates, that the Art of *Agriculture* is
 “ even more necessary, than the *Military*.--
 “ As to the State, Qualification, and Condi-
 “ tion of a Country Life, we may confidently
 “ affirm, that it far excels the City Life,
 “ and is infinitely to be preferr'd before it.---
 “ *Plato* avows a Country Life to be the Pat-
 “ tern of Diligence, Justice, and Frugality,”
 &c.

System. Agric. Pref.

Page 26, *Speaking of Clover*, he says,
 “ In *Brabant*, they talk of keeping four
 “ Cows, Winter and Summer, upon one
 “ Acre of this Grass.---Here, in *England*,
 “ an Acre has kept four Coach-Horses, and
 “ more, all Summer long.

“ In *Wiltshire*, there are several Precedents
 “ of *St. Foyn*, that has been growing, these
 “ twenty Years, on poor Land, and has so
 “ far improv’d it, that, from a *Noble* an
 “ Acre, twenty Acres together have been
 “ constantly let for thirty Shillings an Acre,
 “ and yet continues in good Proof.” Page 29.

“ In every Part of *England*, there is much
 “ waste Land, and other old Pasture, that
 “ bears the Name of barren Land, which,
 “ by good Husbandry, may be made very
 “ fruitful, and profitable, to the Owner, in
 “ particular, and the Common-wealth, in
 “ general ; as is evident, in many Parcels,
 “ lately so improv’d.”--- Page 37.

“ This way of *burning* is us’d on the
 “ poorest, and barrenest Land, in *England*,
 “ or *Wales*, where, before, hardly any
 “ Thing wou’d grow ; and *now*, there grows
 “ as good Wheat, and other Grain, as on
 “ the

“ the finest Land you have. There are ma-
 “ ny Precedents hereof, in several Parts of
 “ *England*, where, by this means only, as
 “ much is gotten, over and above all Ex-
 “ pences, as the Purchase of the Land was
 “ worth before.” *Page 37.*

“ The Advantages of a *Cherry Orchard* are
 “ very great ; Mr. *Hartlibb* gives the Rela-
 “ tion of a Cherry Garden, about *Sitting-*
 “ *burn*, in *Kent*, of thirty Acres, that pro-
 “ duc’d, in one Year, above a thousand
 “ Pound Profit.” *System. Agric. P. 114.*

“ But think it not strange, that common
 “ and well known Plants shou’d prove so be-
 “ neficial ; It is for no other Cause, but that
 “ some Men are more industrious, and in-
 “ genious than others : It is hard to find any
 “ Occupation, Trade, or Employment, by
 “ which a Man may presume on so noble,
 “ and large a Requital, of his Time, Cost,
 “ and Industry. But ignorant, and self-
 “ will’d Men are, naturally, prone to raise
 “ Objections ; and thereby deter themselves,
 “ and others, from any Thing whatsoever,
 “ which is either Pleasant or Profitable.---
 “ However, we hope better of the ingeni-

“ous, who, by becoming Precedents to their
 “Neighbours, may make our Land a Land
 “of Plenty.” *P. 144.*

“*P. 145.*---I mention *Hops*, in the first
 “Place, not for its Worth, or Dignity
 “above the rest, but because, of all other
 “Plants, it advances Land to the highest
 “Improvement; often, to forty, or fifty,
 “and sometimes, to a hundred Pound an
 “Acre.

“Some, who have rais’d good *Liquorice*,
 “have gain’d well by it; the better the Land
 “is, the more is the Advantage,---It has
 “clear’d, from fifty, to a hundred Pound
 “an Acre.” *Page 157.*

I have one great Author more to quote,
 and *That* is a *King*, and a King of our own
 Nation, King *James* the First, who was so
 far from thinking a Regard for this Art be-
 low the Majesty of a Prince, that he has left
 behind him a very uncommon, and remark-
 able Proof, how earnestly he Labour’d to
 encourage it, and how Zealously he recom-
 mended it to his People.---What follows is
 the Copy of a Letter, which he sent to the
Lords Lieutenants of the several Counties,
 in

in *England*, for the Propagation of Mulberry
Trees, throughout the Kingdom.

JAMES REX,

“ Right Trusty, and Well-Belov’d, we
 “ greet you well.--It is a principal Part of
 “ that Christian Care, which appertains to
 “ Sovereignty, to endeavour, by all means
 “ possible, as well to beget, as to encrease,
 “ among their People, the Knowledge, and
 “ Practice of all Arts, and Trades, whereby
 “ they may be both wean’d from Idleness,
 “ and the Enormities thereof, which are in-
 “ finite; and exercis’d in such Industries,
 “ and Labours, as are accompanied with
 “ evident Hopes, not only of preserving
 “ People from the Shame, and Grief of Pe-
 “ nury, but also raising, and encreasing
 “ them in Wealth, and Abundance; the
 “ Scope, which every freeborn Spirit aims
 “ at, not in regard of Himself alone, and
 “ the Ease, which a plentiful Estate brings
 “ to every one in his Particular, but also in
 “ regard to the Honour of his native Coun-
 “ try, whose Commendations are no way
 “ more set forth, than in the People’s Ac-
 “ tiveness,

& tiveness, and Industry.---The Considerati-
 “ ons whereof having of late occupied our
 “ Mind, who always esteem our People’s
 “ Good our necessary Contemplation ; we
 “ have conceiv’d, as well by the Discourse
 “ of our own Reason, as by Information ga-
 “ thered from others, that making of *Silk*
 “ might as well be effected *here*, as it is in
 “ the Kingdom of *France*, where the same
 “ has, of late Years, been put in Practice ;
 “ For neither is the Climate of this Isle so
 “ far distinct, or different in Condition from
 “ that Country, especially from the hither
 “ Parts thereof, but that those Things, which
 “ by Industry prosper *there*, may, by a like
 “ Industry us’d *here*, have the same Success.
 “ Many private Persons, who, for their Plea-
 “ sure, have bred these *Worms*, have found,
 “ that they may be nourish’d, and main-
 “ tain’d here, if Provision were made for
 “ planting of *Mulberry Trees*, whose *Leaves*
 “ are the Food of the Worms. Therefore,
 “ we have thought good hereby to let you
 “ understand, that, although in suffering
 “ this Invention to take Place, we shew our-
 “ selves an Adversary to our Profit, by our
 “ *Customs*

“ *Customs* upon Silk brought from beyond
 “ Sea, which will receive Diminution; Ne-
 “ vertheless, when there is so great, and
 “ publick Utility to come to our Kingdom,
 “ and Subjects in general, and whereby such
 “ Multitudes of People of both Sexes, and
 “ all Ages, such as, in regard of Impoten-
 “ cy, are unfit for other Labour, may be set
 “ to Work, comforted, and relieved; we
 “ are content, that our *private* Benefit shou’d
 “ give way to the *Publick*.---And therefore,
 “ being persuaded, that no well-affected
 “ Subject will refuse to put his helping Hand
 “ to such a Work, as *can* have no other pri-
 “ vate End in *us*, but a Desire of the Wel-
 “ fare of our People, we have thought
 “ good, in this Form only, to require you
 “ (as a Person of greatest Authority, in that
 “ County, and from whom the Generality
 “ may receive Notice of our Pleasure, with
 “ more Conveniency than otherwise) to take
 “ occasion, either at the Quarter Sessions,
 “ or some other publick Place of Meeting,
 “ to persuade, and require such, as are of
 “ *Ability* (without descending to trouble the
 “ *Poor*, for whom we seek to provide) to
 “ buy,

“ buy, and distribute in that Country, the
 “ number of ten Thousand *Mulberry Plants*,
 “ which shall be deliver’d to them at our
 “ City of ----- at the Rate of three Far-
 “ things the Plant ; or at fix Shillings the
 “ Hundred, containing five Score Plants.
 “ And because the buying of the said Plants,
 “ at this Rate, may, at the first, seem charge-
 “ able to our Subjects, whom we wou’d
 “ be loth to Burthen, we have taken order,
 “ that, in *March*, or *April* next, there shall
 “ be delivered, at the same Place, a good
 “ Quantity of *Mulberry Seeds*, there to be
 “ Sold to such, as will Buy them : By means
 “ whereof the said Plants will be delivered,
 “ at a smaller Rate, than they can be afford-
 “ ed, being carried from hence : Having re-
 “ solv’d, also, that there shall be publish’d,
 “ in Print, a plain Instruction, and Direc-
 “ tion, both for encreasing the *Mulberry*
 “ Trees, breeding the *Silk Worms*, and every
 “ other Thing needful to be understood,
 “ for the perfecting a Work, which is every
 “ way so Commendable, and Profitable, as
 “ well to the *Planter*, as to the *Manufactor*.
 “ ---Having now made known unto you the
 “ Motives,

“ Motives, wherein every Man is interested ;
 “ because we know, how much the Example
 “ of our own *Lieutenants*, and *Justices*, will
 “ further this Cause ; if you, and other
 “ your Neighbours, will be content to take
 “ some good Quantities hereof, to distribute
 “ upon your own Lands, we are ready to
 “ acknowledge thus much more, that all
 “ Things, of this Nature, tending to Plan-
 “ tation, Encrease of Science, and Works of
 “ Industry, are Things so naturally pleasing
 “ to our Disposition, that we shall take it for
 “ an Argument of extraordinary Affection to-
 “ wards our Person.---Besides the Judgment,
 “ we shall make of the good Dispositions of
 “ all those, who shall express their Readiness
 “ to further the same, as if they sought
 “ thereby to further our Honour, and
 “ Contentment. We have seen, in few
 “ Years past, that our Brother, the *French*
 “ *King*, has, since his coming to the Crown,
 “ both begun, and brought to Perfection,
 “ the making of *Silks*, in his Country,
 “ whereby He has won, to Himself *Honour*,
 “ and to his Subjects, a marvellous Encrease
 “ of *Riches*.---We shou’d account it no little
 I “ Happiness

“ Happiness to Us, if the same Work,
 “ which we begin, among our People,
 “ with no less Zeal to *their* Good, than any
 “ Prince can have for the Good of *His*,
 “ might, in our Time, produce the Fruits,
 “ which, *there*, it has done; whereof we
 “ nothing doubt, if *ours* shall be found as
 “ tractable, and apt, to further their own
 “ Good, now the way is shew’d them by
 “ their Sovereign, as the Subjects of *France*
 “ have been, to conform themselves to the
 “ Direction of their King. Given under
 “ our Signet, at our Palace of *Westminster*,
 “ the sixteenth Day of *November*, in the
 “ sixth Year of *England, France, and Ire-*
 “ *land*; and of *Scotland*, the two and for-
 “ tieth.”

And now, I think, I have surrounded my
 Cause by such an *Army* of Champions, that
 she need not fear the Onsets of the Envious,
 or the Ignorant.---With how much Ease
 cou’d I have brought a thousand Testimonies
 more! But the *wise* will own Demonstration,
 at her first Appearance, and, to *Fools*, or
Madmen, who addresses his Endeavours?

The

The Use, I wou'd propose from all these Proofs, is, that the *Owners* of our Lands, being thus convinc'd of the *Dignity*, and *Profit*, of an Art they have so long neglected, or been ignorant of, wou'd, for the future, apply their Judgment *most* to the Improvement of those Estates, which most deserve their Application, and will best reward it.---Such a noble Industry wou'd set them, soon, above a thousand daily Mortifications of their present Condition, and be the only means to recover that Respect, which was antiently paid to the *Landed Interest* of this Kingdom.

But, it remains that, having said so much of the *Design*, I shou'd be a little particular, as to the manner of Executing it. I shall Write something, on this Head, as briefly, as I can ; there being more already Written, upon that Subject, than is generally known. ---I have myself collected near a hundred Volumes, some of which are excellent, in their several Kinds, and may almost merit the Title of compleat *Systems*. The Study itself, as 'tis far from difficult, will also prove the most delightful, you can possibly engage
 4 in ;

in; and there only want *Beginners*; for, when the Ice is broke, the Waters will be found so very sweet, and tempting, that few wise Men will draw, for constant Use, from any other Fountain.

To instruct the *Willing* what Books they may enquire for, I will name the Authors, from whom you are to expect most Information in the Art, and all its Branches.

There are many Pieces extant, under the Title of *Transactions of the Royal Society*, which are interlac'd abundantly, with excellent Instructions, and Experiments, in Husbandry.---Many of the famous Mr. *Boyle's* Works are enrich'd with curious observations of this Nature.---

Lord Veru'am's Natural History.

Systema Agriculturæ---By Mr. *Worlidge*.

The whole Art of Husbandry. By *J. Mortimer*, Esq;

Part the 2d of the same---By the *same* Author.

Sylva, or a Discourse of Forest Trees,
By *J. Evelyn*, Esq;

Dr. Beal, of Herefordshire Orchards.

Markham's

Markham's Enrichment of the Weald of Kent.

English Husbandman. By *G. Markham*.

Farewell to Husbandry. By the *same Author*.

A Discourse of the Flanders Husbandry. By *Sir R. Weston*.

Hartlib's Legacy of Husbandry.

Annotations upon the Legacy. *Edit.* 3d.

Jewel House of Nature, and Art. By *Sir Hugh Platt*.

Adam's Art reviv'd. By the *same Author*.

Of the Improvement of barren Land.

By *T. G.*

Dictionarium Rusticum, &c.

Googe, of Husbandry.

Blith's English Improver.

Improver improv'd. By the *same Author*.

Houghton's Letters of Husbandry and Trade.

A Discovery of Hidden Treasure. By *G. Plats*.

These, or such of them, as you can most readily procure, (for some of these are very scarce) will give the utmost Knowledge requisite, for as large Improvement, as in any of the foregoing Precedents.

G

But



But I hasten to my own particular Task, and will undertake to prove, that every private Gentleman, in *England*, may, by taking his Lands into his own Management, advance his Estate, immediately, to a *double* Value, and *That*, without the Trouble of seeking much Knowledge, or making new Improvements;--even, by the downright *common* Road of Husbandry, as it is now practis'd.

And here it will be no Objection to tell me, *Gentlemen* are wholly ignorant in these Affairs, and that we see, by general Experience, that Men, who do take Lands into their own Hands, are always Losers by the Bargain.---I deny the Observation; or, if 'twere true, it makes nothing against my Argument: For they, who, having Farms thrown up by their Tenants, leave the Cultivation of them to their *Stewards*, taking such Accounts, as *They* think fit to give them, may well be Losers by the Bargain; and yet This is what we call keeping Land in our own Hands.

But, previous to my Argument, I observe, that, though 'tis not necessary for a Man, who

wou'd double his Rents, to be much skill'd in Husbandry, we must, at least, suppose him a Person of good Understanding, in common Matters, and of an industrious Disposition ; one, who will allow, that so considerable an Augmentation of his Estate, deserves six Months continuance in the Country.

Suppose we then a Gentleman, so qualified, and so dispos'd, has a Farm thrown into his Hands, at *Lady Day*, which contains, of Arable Land, a hundred Acres :---He is, just about this Time, come down to pass the Summer, at his Country House ; and, when his Steward tells him, that, no new Tenant offering to take his Farm, it will be best to sow it on his own Account, how easy wou'd it be to fend for others of his Tenants, and, in order to determine which way to proceed, ask these kind of Questions.

I have an Inclination to *till* the Farm, which is newly quitted ;-- *Is it in a good Condition ?*

They will tell him---*No*---That it has been Plow'd so long, till the Heart of the

Ground is worn away ; and that it will require new *making*, as they call it, that is *Manuring*, before it can be fit to bear any kind of Grain to Advantage.

What is the fittest Manure for the nature of the Ground ?

The Answer will be, *good Dung*.

How much on an Acre ?

About twenty Load.

What will it cost a Load ?

About twelve Pence.

What Grain will it bear after this Charge ?

Wheat.

Is the Season proper ?

Yes ; we sow Wheat in *September*, or *October*, and there is Time enough to prepare the Ground between this, and then.

Pray, let me know the whole Charge of an Acre of Wheat ?

Why, the Ground, being already in Tillage, will require, besides the Dunging, *two Plowings* only, and each Plowing will be four Shillings an Acre : The *Seed* will be two Bushels to an Acre, which, at five Shillings a Bushel, comes to ten Shillings more :

Then

Then there is *Weeding*, and *Reaping*, and *Binding*, will be about five Shillings more : Then *Inning* of Harvest, and repairing of Fences, may be five, or six Shillings : And as for *Thrashing*, the Charge of that may be, according as the Crop proves.

How so ?

Because we pay the Thrashers for Wheat, after the Rate of threepence a Bushel.

How many Bushels have you commonly on an Acre ?

Why, that is just according as it happens, sometime more, and sometimes less : I have known four, or five Quarters upon an Acre ; and, at other Times, I have reap'd but two Quarters ; But upon new made Lands, we generally reckon *thirty Bushels* a middling Crop.

But am I to Dung my Ground every Year ?

No---once Dinging will hold out three Crops.

May all these Crops be Wheat ?

No :---That wou'd not be proper ;---The *first* shou'd be Wheat, the *next* may be Barley, and the *third* Pease.

What are the different Values of these Crops ?

Why, we generally reckon a Wheat Crop, as I said, about thirty Bushels ; and truly Pease, and Barley, bear as many, or sometimes, a pretty deal more.

Are the Charges of the Barley, and Pease Crops, the same, as the Wheat, only bating the Dung ?

No : very different : In the Barley, which is mow'd, instead of reaping, you save, by That, and other Things, about seven Shillings an Acre ; and Pease, being cheaper in the Seed, and requiring to have the Ground but once Plow'd, will stand you in less, than the Wheat Crop, by above thirteen Shillings an Acre, besides the Charge of your Dung, sav'd.

It must be allow'd me, that all these are Questions which any Gentleman may have Wit enough to ask ; and, if That be granted, I am sure, the Answers, he must receive, will make much better for my Argument, than those I have set down : For, I have, purposely, enlarg'd the Charges, and diminish'd the Crops, even in the *common* way of reckoning ;

reckoning ; as any Body may know, who will give himself the Trouble of an Enquiry.

Well then ; The Use, which any *thinking* Man wou'd make of these Informations, wou'd be This : He wou'd presently go into his Study, and, writing down the several Particulars, compute the *Expence*, and compare it with the *Income* ; which Account wou'd stand thus.

Expence of an Acre for the three Crops.

Twenty Load of Dung, at	<i>l.</i>	<i>s.</i>	<i>d.</i>
1s. a Load - -	1	00	0
Two Plowings, Each 4s.			
for the Wheat - -	0	08	0
Two Bushels of Seed Wheat,			
at 5s. Each - -	0	10	0
Weeding, Reaping, and			
the Binding Wheat - -	0	05	0
Inning the Wheat, repair-			
ing Fences, &c. - -	0	06	0
Thrashing the Wheat - -	0	07	6

	<i>l.</i>	<i>s.</i>	<i>d.</i>
The whole Charge of the Barley Crop, being less, than the Wheat, besides the Dunging, by seven Shillings - -	1	11	6
The whole Charge of the Pease Crop, being less, than the Wheat, by thirteen Shillings - -	1	05	6
	<hr/>		
Total Expence	5	13	6
	<hr/>		

Income of an Acre, by three Crops.

Thirty Bushels of Wheat, at 5s. a Bushel - - -	7	10	0
Thirty Bushels of Barley, at 2s. 6d. - - -	3	15	0
Thirty Bushels of Pease, at 3s. 6d. - - -	5	05	0
The Straw of the three Crops, tho' but to burn, will be worth - -	0	15	0
	<hr/>		
Total Income	17	15	0
	<hr/>		

By

By this Computation, he wou'd perceive, that, even according to the Countrymen's own way of reckoning, the Profit wou'd be more than three times the Charge ; so that, supposing his former Rent to have been so much as one Third, his present Charge wou'd be but another, and, it therefore, plainly appears, that, in this beaten Road of Husbandry, the Revenue of his Farm will be more than *doubled*.

But I needed not have taken so much Pains to inculcate a Truth, which the Farmers themselves are always ready to confess ; allowing it for a general Maxim, that *a good Farm must yearly make three Rents*, the first, for the *Landlord*, the second for *Charges*, and the third, for the *Tenant* and his *Family*. And, indeed, if this were not so, the Renters of Land must starve, or pay nothing.---Let it, therefore only be allow'd me, that the same Workmen, at the same Charge, can do That for a *Gentleman*, which they do for a *Clown*, and you prove this Position, for yourselves, to the direct *doubling* the Value of your Estates.

I might also hint the great Advantages, which most Gentlemen have of common Farmers, as to the expenfive Part of this Work ;---The Dung, the Horses, and the Workmen : And what Gentleman, of any Note in *England*, who has not, or who might not have, all these at Call, without the least additional Charge to his common Household Expences ?

If any Body will continue to oppose the weak, old Argument against me, of *Every Man in his own way*, and that there are *certain Secrets in the Practice of this Art*, which the Farmers keep among themselves ; and which Gentlemen, or Those they employ, must be ignorant of, and, of Consequence miscarry ; I content myself to Answer, once for all, that this Objection is so far from being just, that it deserves no further Notice.

The foregoing Plan, for three Years Tillage, though exactly suited to the *common Road*, is very far from being recommended, as a Pattern ; 'tis the *least* Improvement you can make of Land, and the worst way of making it into the Bargain. It is only introduc'd to shew how easy it is for any Man to be instructed in the Farmer's whole Treasury
of

of Knowledge: For all, beyond that little Store, is *Terra incognita* to the deepest of their Discoveries.

Some Gentlemen may think it too much Pains, and Trouble, to attend a three Years issue of their Labour, which is, also, *then* to be repeated, if they wou'd keep up their Advantage. I shall not advise such Persons to commit the Management of the Affair to Deputies, tho' never so much esteem'd, and faithful.---Indeed, the toilsome Part, and the continual Application requisite, may well admit of an honest Servant's Attendance; but the frequent Inspection, Reproof, and Encouragement, of the Master himself will be absolutely necessary. And 'tis no ill Doctrine, we are taught by a plain Country Proverb, which tells us, that the *best Dung in the World is the Master's Foot*.

But there are many Men, whose Genius cannot hit the Relish of our Country Employments: These seldom enter *Corn Fields*, but through the *Hedges*; nor wou'd know the name of *Stubble* but for the Game *it* shelters: Such, as these, are kept back, by Nature, from an Application to Improvement,

ment, and will not consider, that the frequent Intervals of Business, and Pleasure, heighten, and encrease the Satisfaction of each other. There are some again, who, though they cou'd, with much Delight, pursue the Practice, are depriv'd, by other Calls, of Leisure to attend it.

There are many ways, whereby these Gentlemen may, notwithstanding this, improve their Rents, at once indulging both their Inclination, and their Profit; and That not out of the common Road neither.---I cou'd demonstrate This by many Instances, but will confine myself to one Proof only; supposing that, when Men are once convinc'd, a Thing is to be done, they will readily bestow a little Thought upon the wisest Method of performing it.

I will put such a Gentleman into the same Condition with the former; He has a Farm of a hundred Acres, thrown into his Hands, at *Lady Day*: The Heart of the Ground has been plow'd out, by a malicious, or an indigent Tenant: The badness of his Land invites no Bidder, till, perhaps, towards *Michaelmas*, some monied Neighbour, to
take

take Advantage of this Circumstance, bids a Crown an Acre; the Gentleman had let it, before, for ten Shillings, and is, therefore, unwilling to have it go, at a half Rent, but the other will give no more: The Farm, as the Country Phrase runs, is *blown upon*; no Body offers otherwise; The Owner can make nothing of the Land himself, and, after the loss of a Year's Rent, the Farm is let for five and twenty Pound per annum, which, till then, had always gone, at fifty.

This is the very Case of many a Gentleman in every Part of this Kingdom. I have known a Plot laid, by a dozen rich Farmers in a Neighbourhood, *to pull down a Plume*, as they call it: And, tho' the Abatement is not always so Monstrous, as we suppose it here, yet by a little *this Year*, and a little *next*, it generally comes to one, and the same Conclusion.

Now had this Gentleman, among all his Amusements, but just found Leisure to inform himself, that ten Shillings worth of Dung, upon an Acre, wou'd qualify his Land for St. *Foyn*, or *Clover*; and that the whole Charge of such an Improvement
wou'd

wou'd scarce exceed the Year's old Rent of his Ground, he wou'd certainly sow one of those Grasses, according to the Nature of his Soil ; and, if he did, without any further Charge, or Trouble, he wou'd have Offers enough : And the very Man, who, were his Land neglected, wou'd have had it, at five and twenty Pound a Year, will now be glad to come in, upon this Improvement at *Michaelmas Day*, and give him two Hundred.

'Tis true, I have often known *Clover*, and *St. Foyn*, make little Improvement ; but the Ground has neither been rightly prepar'd, nor the Seed well chosen, or well sown. 'Tis a standing Custom among Countrymen to sow *Clover*, with *Oats*, or some other *Grain* ; And this they do, for the Advantage of a poor Crop the first Summer, before the Grass is come to Perfection : But they are ignorant, that, by this means, the *Clover* can never cover the Face of the Ground, but, growing thin, and here and there, in Tufts, and Parcels, the natural Children of the Field, Weeds, common Grass, and Trum-
 pery,

pery, prevail against it, and, in a Year or two, after the first, it is quite choak'd, and comes to nothing.

But I have done with this Particular, and hasten to direct, not a new Husbandry, but a *new Method* of Husbandry.---I speak now to such, as are *willing* to improve their Estates, but ignorant in the *means* of doing it.---I design not to advise the Propagation of *Woad, Madder, Saffron, Liquorice, Hops, Safflower, Rape-seed*, or other Plants of this nature.---A general Application to Agriculture wou'd suddenly discover, and pursue the vast Advantages, accruing from so desirable an Industry. But, as I have said a Word or two of the *common Paths* in *common Husbandry*, so I will demonstrate by what means any Gentleman, who wou'd set about the same Work, in an *uncommon manner*, may proceed to a very great Enlargement of his Fortune, by the Grains, in general use amongst us, such as *Barley, Pease, Wheat, Beans, Rye, Oats*, and such like Things, which have a use in every Part, and find a Vent in every Market.

I will not insist upon a frugal Method, which might very decently, as well as profitably, be introduc'd, of keeping the same Horses for our *Teams*, which we maintain for our *Coaches*, and the same Servants for our *Labour*, which we make use of for our *Vanity*. I know, the fine, unthinking Part of Mankind are apt to turn this wise Frugality into Ridicule, and expose it, as an Act of Avarice, or want of Relish in the politer scenes of Life : But, when I address myself to the *prudent* Man, I may venture to tell him, that, in my Opinion, the honest, brisk Fellow, who drives my Plow, in an old, dirty Coat, may as well become my Coach Box, in a good Livery ; And that I may look for faithful Service, and Obedience, with far less Danger of a Disappointment, among such poor Men's Children, whom I educate at once to Labour, and Attendance, than from a Crew of idle Dissolutes, who, measuring a Master's Goodness, by his Easiness, or his Extravagance, are contented in my Family no longer, than I can resolve to wink, and let them cheat me.

However,

However, let the Gay indulge their Vanities : 'Tis but resting satisfied with an Estate, by so much lower than their Neighbours, of another Temper, as their Equipage appears above him. If they but encrease their Fortune, 'tis an Insolence to question how they use it; and the Industry, requir'd in this way of getting, is thus far less irksome, than in any of the usual Paths of Life, that you may take your Swing of Pleasure, and yet fear no Ruin :---*London*, and her various Amusements, may engross your *Winters*, while your *Summers* are devoted to your Country Tasks, not less adorn'd with Beauties, and Temptations, though of another Nature.

I must here look back upon the Owner of those hundred Acres, which I suppos'd thrown into his Hands, and tempting his Endeavours to improve their Value. This Gentleman, pursuing the Advice of his Tenants, lays twenty Load of Dung upon an Acre, and sows Wheat for the first Crop.---His Expences stand thus.

H

Dunging

	<i>l.</i>	<i>s.</i>	<i>d.</i>
Dunging 100 Acres, with 20 Load on an Acre, each Load 1s. - -	100	00	0
Twice plowing each Acre, at 4s. each Plowing -	40	00	0
Ten Shillings an Acre for the Seed Wheat - -	50	00	0
Weeding, Reaping, Bind- ing, at 5s. an Acre - -	25	00	0
Repairing Fences, Inning Harvest, &c. at 6s. an Acre - - -	30	00	0
Thrashing the Corn, at 7s. 6d. an Acre - -	37	10	0
	<hr/>		
	282	10	0
	<hr/>		



Now, nothing can be more demonstrable, than that this Gentleman, in laying out two hundred, and fourscore Pounds, spends fixty, at least, more than is needful; for one hundred Acres is no more than two Oxen can very well manage, and the Team may be guided by one Man: I know, I am out of the common Road, but no Matter; what I say has been prov'd on the heaviest Land,
in

in *England*.---A good Yoke of Oxen will cost him about eight Pound, and require three Pounds worth of Hay, to help out their Grafs-feedings;---A Plow, Harness, and the necessary furniture of a Team, with other Tools, and Instruments, the Man may want, will be three Pound more: The Wages of this Man may be five Pound a Year, and his Meat, and Drink, tho' a very Trifle in a Gentleman's Family in the Country, we will reckon six Pounds more. All this amounts to but five and twenty Pounds; and, for this Charge, the Owner of the Ground will save thirty, or forty Pound, in the carrying out his Dung; fifteen, in the two Plowings, and, in the Fencing, Weeding, Reaping, Thrashing, and other Charges, at least so much more, as amounts to the Sum above-mention'd.

I will now undertake to demonstrate, how any Gentleman in *England*, whose Estate is mortgag'd, though for above half its Value, may clear the Debt, by the first Year's Improvement, and, at the same Time, raise the Rents to thrice their present Income. I am sensible, there is a very material Diffe-

rence in the Situation, and Condition of Lands, but I will obviate that Objection, by making Choice of the most *ordinary* Sort, supposing it will be readily allow'd, that what the Worst can do at all, the Best can do more easily.

Let the suppos'd Estate be a thousand Pound a Year, and mortgag'd for ten thousand Pound, and suppose it too, at six per Cent: the Interest of this is six hundred Pound a Year; and which is, indeed a very great Hardship, the Person, who thus receives the best half of the Estate, receives it *Scot-free*, as the Proverb says, while He, who pays away the largest Part of his Substance, pays Taxes for that very Payment; and 'tis well, if two hundred Pound a Year excuses him; so that the poor Gentleman, who passes for the Owner of a thousand Pound per Annum, and must live, and educate his Children accordingly, does, in Reality, receive scarce two Tenths of the Estate, for his own Share.

In this Condition, what shall he do? He is already a *Husband*, and a *Father*; He cannot, therefore, hope a Remedy from the
common

common Practice of tying one Knot to untye another ; He is unqualify'd for Court Attendance, or, perhaps, too wise to risque his Ruin in a Disappointment. He cannot *buy* a profitable Post, and wants an Interest to get one *given* him : What Course shall he take ? To continue, as he is, were mean, and miserable---And how to better his Condition, He is wholly ignorant.

At last, it enters his Imagination, that his Land may be improv'd, if he had it in his own Hands : He computes the Charge, but knows not how to get so large a Sum together : However, He tries the Force of his Credit in every Place, he can expect Success from : He obtains as much, as he can, by this means, upon the best Security he can make ; his Friends assist him with a little more, and, when he finds, he has a Prospect of becoming able to go through with the Design, he warns his Tenants out, and puts himself in Readiness.

If this prudent Resolution be accompanied with a Skill sufficient, he will first consider the Quantity of Land he is about to undertake, and what different Operations will

be requisite, for the different Natures of his Soil.---But I will suppose it all alike, and all of the worst Sort; such as having been let to Tillage, and occupied by Tenants at will, at about five Shillings an Acre, has been only qualified, by lying fallow one Year, to bear a poor Crop the next; and, by this Account, the whole will consist of four thousand Acres.

The great, and most necessary Consideration, here, will be what kind of *Manure*, and what Quantity of it must be us'd, as also how to find it. He is skill'd in the Knowledge, which will be taught you by and by, in the Discourse of *Soils*, and *Composts*, and needs not, therefore, be inform'd, that so large a space of Ground must yield, in several Places, plenty enough for Digging -- (mark this single Advantage of Skill;--- A Man who knew it not, must buy Dung, and that Charge only wou'd make two, or three thousand Pound odds, in his Reckoning.)---Let us imagine then, for the further Demonstration of this Argument, that *Marle*, because that Manure is by much the most costly to lay on, is what he finds, and resolves

solves to use, after the Rate of a hundred Load upon an Acre.

For every hundred Acres he must provide a Team of two Oxen, and a Plowman, to turn up the Ground twice; once before the Marle is laid on, and once after: This Man, by the use of a Plow, hereafter described, can manage two Acres a Day, so that, reckoning two hundred working Days between *Lady Day*, and the end of *October*, he will have time to spread the Marle in an Afternoon, which is brought on in the Morning, and to Harrow the Ground he has Plow'd, sow the Seed, and do all that depends upon this Part of the Labour.

Besides this, there must be, for every hundred Acres, two Drivers, two Teams, of three Oxen, each: Three Carts, to carry Marle; and a Digger, at the Pitt, who fills one Cart, while the Teams are drawing the others to the Place of Delivery: This Filler, by the assistance of the Drivers, can easily send out fifty Load a Day, or more, were it requisite: But that is the exact Number necessary to compleat the Task, in the time above limited.

When the Ground is thus enrich'd by *Marle*, or any other good Manure, He will sow *Wheat*, and the whole Expence will be as follows.

Eighteen Months Wages to 40			
Plowmen, each 5l. per Annum	300	0	0
The prime Cost of 40 Teams, 2			
Oxen in each - - -	320	0	0
For Plows, and Harness,&c. for			
these Teams - - -	100	0	0
For 120 Carts, Spades, Tools, and			
other Utenfils - - -	400	0	0
Eighteen Months maintenance for			
the 40 Plow-men - - -	300	0	0
Six Months wages to 120 Drivers,			
and Diggers of Marle - - -	300	0	0
Six Months maintenance for the			
same - - -	300	0	0
For the prime Cost of 80 Teams			
of Oxen, Three in a Team -	960	0	0
Additional Expences, which may			
casually arise from such a new			
number of Dependants - - -	150	0	0
For eight thousand Bushels of Seed			
Wheat - - -	2000	0	0
	<hr/>		
Total Expence	5130	0	0
	<hr/>		
	If		

If any Body objects, that this is not the whole Expence, because the Charges of Reaping, Thrashing, &c. are not included, I answer, that the *Autumn* before this Work is begun, the Owner of the Land should chuse about forty, or fifty Acres of good Ground, whether his own, or to be rented; and, breaking it up, and burning, as hereafter is describ'd, sow it with the Seed of right *Flanders Clover*: This will grow up against Spring, to a full Capacity of serving all his Cattle the whole Summer; And, when the Marling Teams have done their Work, they may be fed up, upon the Clover, till they are fit for Slaughter, and sold for, at least, fifteen hundred Pounds, tho' their prime Cost was not two Thirds of the Money: And this additional Sum will be more than sufficient for all the objected Expences of the Harvest.

I have reckon'd this Charge by much at the largest, and I chose to do so, to prevent the Cavils of the Slothful, or Conceited.--- There are Methods, which are daily practised, whereby a Man might save by much the largest Half; but this wou'd gain Belief
with

with so much Difficulty, that I studiously avoid any more, than the bare Mention of a Thing so seldom heard of.

Well! the Labour, and the Charge is over: Let us get in Harvest.---'Tis done; the Wheat is thrash'd, and what do you imagine is the Product of an Acre?---You wou'd think me mad, to talk of five and twenty Pound, so I forbear what *may* be, and since I am driven to plain what *must* be, will content myself to take the *odd five* only. This no Man alive dares contradict; and even by this Calculation, the Produce of the four thousand Acres will be sold for twenty thousand Pound. The Mortgage is paid; the Money borrow'd, for this Work is joyfully return'd; the Gentleman has two, or three thousand Pound in his Pocket, and his Ground is so much better'd by the Marle upon it, that, if he is not tempted, by the issue of his first Endeavour, to keep it under his own Management, he may let it out, and chuse his Tenants; and his Thousand Pound a Year will certainly be three, or four Thousand, from that Day forwards.

But,

But, because the Nature of Things is best known by Comparifon, I will give you the Copy of a Letter, which was fent to a Friend of mine, by a Gentleman, to whom he had communicated a Defign, of endeavouring to improve his Eftate; and which prov'd the happy means of rivetting his Refolution.

“ S I R,

“ I receiv'd yours a Week later than you
 “ may have imagin'd, which was occafion'd
 “ by an accidental Journey to my Sister
 “ B---s; I had otherwife made no delay in
 “ anfwering, and the rather, becaufe the
 “ Subject of your Letter pleafes me.---It
 “ wou'd rejoice your Father's Heart, cou'd
 “ he revifit Life, to fee you begin fo early to
 “ grow wife.---God has given you a ftrong
 “ and healthful Body, and a Mind, unim-
 “ pair'd by the influence of Age, or Sick-
 “ nefs: Thefe were Bleffings, your good
 “ Father wanted; and he has often lamented
 “ the Misfortune to me, becaufe it render'd
 “ him unable to improve an Eftate, which
 “ he was griev'd to think muft defcend to a
 “ Son,

“ Son, so much belov’d, with a Clogg, he
 “ was afraid, wou’d hinder you from its En-
 “ joyment.

“ I am well pleas’d to hear, that your
 “ Uncle G--- is so good natur’d, to consent
 “ to do, as you inform me.---You shou’d
 “ have found the same Compliance in me,
 “ rather than I wou’d have seen so excellent
 “ a Design overthrown, for want of Power
 “ to finish it; and pray, take a Friend’s
 “ Privilege to assign me my Part, in the
 “ Furtherance of your Endeavours.

“ And, whereas you ask my Counsel in
 “ the Matter, I give it very gladly, and
 “ with great Sincerity; put your Hand to
 “ the Plow, and draw it not back, because
 “ your Measures are the wonder of your
 “ Neighbours. No Man had more of That,
 “ than I, when I begun this way. Indeed,
 “ you are better arm’d against Remark, and
 “ Ridicule: I had no Land of my own to
 “ improve, and a sorry Stock, God knows,
 “ to set me forward.---Your Father has oft
 “ heard me own, and I am far from being
 “ ashamed to confess it publickly, that two
 “ hundred Pounds was all, which had been
 “ sav’d

“ sav’d me from the Wreck of a very confi-
 “ derable Fortune : But my Genius always
 “ led me to a Desire of being settled in a
 “ Country way ; and a Book of Mr. *Hart-*
 “ *lib*’s, call’d the *Legacy of Husbandry*,
 “ (which Book, by the by, I wou’d advise
 “ you to read,) had possess’d me with a No-
 “ tion, that great Things were to be done in
 “ that way ; But the Practice of the Law,
 “ to which I had been Educated, and by
 “ which I made a shift to eat, and drink,
 “ Three Pair of Stairs high in Lyons Inn,
 “ allow’d no Leisure, or Ability, to put my
 “ Inclination to the Tryal of Experience.
 “ But, at last, when it pleas’d God, my
 “ Mother died, and the two hundred Pound,
 “ a Sum the Profits of the Law had never
 “ shewn me, as little as it was, became my
 “ own, I made a Resolution to pursue my
 “ Wishes.

“ I took a little Farm of twenty Pound a
 “ Year, and became Master of a Man, a
 “ Maid, and a poor Beast, or two, which
 “ was all my Family ; I had like to have
 “ spoil’d all, by venturing too far at first, but
 “ with much ado my Stock held out, and,
 “ when

“ when I cast up my Account at the Year’s
 “ End, I found all Charges paid, and about
 “ five hundred Pound in my Pocket.

“ My Cottage was now become too nar-
 “ row for my Ambition, and I began to
 “ form strange Schemes of growing, in
 “ Time, to be a mighty Man. I think, it
 “ was *Cæsar* who us’d to say, He wou’d not
 “ entertain a common Soldier in his Army,
 “ who did not absolutely hope to see him-
 “ self a *General*. And I assure you, that a
 “ worthy manner of *aspiring* even among us
 “ *Rusticks*, is the surest Tie upon our Dili-
 “ gence, and Industry; we pursue a Labour
 “ with a double Eagerness, when it offers
 “ pleasing Prospects to our Hope, and can-
 “ not easily be tir’d, if we always keep in
 “ view the point of Happiness, we aim at
 “ reaching.

“ But I wander from my little Farm,
 “ which I exchang’d for one of fifty Pound
 “ a Year, and which contain’d about two
 “ hundred Acres. I made my augmented
 “ Stock hold out to fit the Ground for bear-
 “ ing Wheat; and this Year, I clear’d above
 “ twenty Pound an Acre, to my own Amaze-
 “ ment

“ ment at the unexpected good Fortune, and
 “ the Rage, and Envy of my Neighbours,
 “ who had banter’d my new methods of pro-
 “ ceeding, and cou’d not bear to see the Jest,
 “ thus, turn’d upon them.

“ I now look’d upon myself, as a *made*
 “ *Man*, and, having jump’d, as it were at
 “ once into Plenty, I resolv’d to pursue the
 “ Game at all Advantages ; I encreas’d my
 “ Quantity of Land in proportion to my
 “ Stock, which I more than *doubled*, in a
 “ Year so very hurtful, and unseasonable,
 “ that it ruin’d many Farmers of considerable
 “ Substance, who had not so much Skill, or
 “ so much Luck, as myself.

“ By this Time, I began to think of Mar-
 “ rying, for I found myself in a Condition
 “ to admit of chusing Merit without Mo-
 “ ney ; But I had the good Fortune in my
 “ old Girl, who, by the way, is much your
 “ humble Servant, to meet with an admi-
 “ rable mixture of both these Bleffings.
 “ And I now, thank God, improve an Es-
 “ tate of my own ; and, in all the Practice
 “ of my Life, have had such Proofs of an
 “ infallible Reward of Industry, in this ho-

“ next way, that I cannot help rejoicing, in
 “ a more than ordinary manner, to see the
 “ Child of my Friend so likely to be made,
 “ at once, a *good Man*, and a rich Man.

“ I wou’d answer all your *Queries* in par-
 “ ticular, but have writ so much already, that
 “ I have no Room. And your little Wife
 “ says, if you want a Letter from her Father,
 “ you may come yourself, and fetch it: I
 “ expect to see you here; you know you are
 “ always welcome; and, against you come,
 “ I will prepare a Paper of Directions, which
 “ you may, hereafter, have occasion to
 “ thank me for.” I am &c.

I have inserted this Letter, as a Proof,
 that what I am advising has been found very
 possible; and indeed, if Men wou’d suffer
 themselves to be convinc’d, either by Reason,
 or Experience, they wou’d meet, in
 their pursuit of Wealth, this way, no Ob-
 stacle, but Sloth, between their Aim, and
 their Accomplishment.

Now, because I wou’d leave nothing un-
 said, which may be serviceable in the Prac-
 tice of what I am recommending, I will as
 briefly

briefly, as is possible, describe the proper manner of proceeding, not as *is* done, but as *shou'd* be done by skilful Undertakers. I shall not lead you thro' a Field of Intricacies, and distract your Imagination with a Croud of Precepts. The utmost Knowledge, necessary to the End I have propos'd, may lie in a very little Room, and I will endeavour to give it, at one View, as nearly as I can.

I begin with *Manure*, that necessary Help to Vegetation, and *primum Mobile* of all Improvements.----There are many excellent Kinds, such as *Shavings of Horn*, *Choppings of Rags*, the *Comings*, or *Dust of Malt Heaps*, *Pigeon's Dung*, *Soap Ashes*, *Lime*, and others : All which are wide of my Purpose, because they must be *purchas'd*. I, therefore, only mention them, and pass them by, to treat of such, as, being every way superior to them in their Operation, are also to be had at no other Expence, than that of *Carting*. These are *Marle*, *Chalk*, *Ful-
lers Earth*, *Clay*, *Sheeps Dung*, *Sea-owse*, *River mud*, *Sea-sand*, and *Sea-weed*.

I

It

It is to me a surprizing Proof of our Gentlemen's Inaptitude to this noble Art, to see so many hundred thousand Acres pester'd, and corrupted, by *common Dung*, the Bowels of which very Land are loaded with inexhaustible Quantities, of rich, and wholesome Physick, for its own Diseases.---*Dung* is not only prejudicial to *some* Soils, but inferior to the worst of other Composts, upon *any*. One wou'd wonder to see, how People put themselves to extraordinary Charges, and the Inconvenience of sending to great Distances, for *Lime*, or *Horse Dung*, to Manure those very Lands, which never fail of being verg'd, or bottom'd by a Substance, of one kind, or other, by far more proper for the End, they aim at: And, therefore, I lay it down as a Rule, almost without Exception, that, as every *Climate* is suppos'd to produce naturally, were the Virtues of all Simples known, unquestionable Cures for the Diseases it is subject to, so every *Soil*, of what Nature, Situation, or Condition so ever, abounds with natural, and sufficient *Helps*, for its peculiar *Imperfections*.

The



The only Difficulty is, how this Treasure shall be discover'd, and applied, and I will make both these alike easy to your Practice. ---I begin with *Marle*.

There are many different Kinds and Colours, severally distinguish'd by many Writers; but their Virtue is the same; and they may all be us'd upon the same Ground, without the smallest difference in their Effect.---I have seen nine several Sorts, within a very small Compass of one Gentleman's Lands, and am pretty sure, there are few Vallies, Sides of Rivers, or hanging Grounds in *England*, but abound in one, or more Kinds of this incomparable *Manure*.

In many Places, it discovers itself to the most negligent Eye; especially, upon the Sides of broken Hills, or deep hollow Roads, as you travel through most Counties in the Kingdom.---The *Thames* possesses an inconceivable Treasure, on both her Sides, which is plunder'd, more or less, by every Tide, and may be seen, as you pass in Boats along her Banks, both above, and below *London*.---*Boggy Lands* frequently cover it, and, in such, it seldom lies above three Foot
I 2 deep;

deep ; 'tis somewhat lower, under stiff Clays, and *marshy level Grounds* : Most *Sandy Lands* abound in it, in their lowest Places, at sometimes three foot Depth, and sometimes seven or nine, and I have known it deeper. As for the *Marle* itself, 'tis seldom you can find its Depth, for, when the upper Crust of the Earth is once remov'd, all you can see, or dig, is *Marle*, and I cou'd never yet see any Pit exhausted.

There is nothing more common, in most Places, than to find the Ditches, which enclose a Field, dug down so deep, that they have penetrated, six or seven Inches, into a Bed of *Marle* that lies under them, without knowing any thing of the Matter, tho' the prodigious Shooting, and Encrease of the Grass, which is put forth by the *Marle*, thrown up upon the Sides of the Bank, might, one wou'd think, be a means of discovering it ; for, tho' the Dryness of such Banks, in other Places, do not only make them unfit for bearing kindly Grass, but apt to moulder down in Summer, and wash away with Winter Rains, yet, where the *Marle* is thus, by Accident, disclos'd, it
does

does not only turf the Sides, and Tops, of the Banks, and so secure it against all Injuries of Weather, but causes the Grass to grow to such surprizing Length, and Thickness, that, being beaten down by Winds, it hangs along, as if it *thatch'd* the Earth, which nourish'd it, and carries off the Rain, without permitting any considerable Quantity to enter through it.

The Colour is, either *red, brown, yellow, blue, grey, or mix'd*; it is to be known by its pure, and uncompounded Nature; there are many Marks to distinguish it by; such as its breaking into little square Bits; its falling easily to Pieces, by the force of a Blow, or, upon being expos'd to the Sun, and the Frost; its feeling fat and oily, and shining when 'tis dry.---But the most unerring way to judge of *Marle*, and know it from any other Substance, which may appear like it, is, to break a Piece, as big as a large Nutmeg, and, when 'tis quite dry, drop it to the Bottom of a Glass of clear Water; where, if it be right, it will dissolve and crumble, as it were to Dust, in a very little Time, shoot-

ing up many Sparkles to the surface of the Water.

Wou'd you learn a very easy, and infal-
lible Method of discovering, whether there
is any *Marle* in Places, you imagine it may
lie under?---Order a *Smith* to make three
Iron Augers, of near an Inch Diameter, and
to each, affix an Iron Handle, crosswise;
let the Bitts of these Augers be made pretty
large, and tenacious of what they pierce;
the first may be *three* Foot long, the second
Six, and the third *Ten*. When you wou'd
try the Place you have Hopes from, carry
thither these Augers, and cause a Servant to
take the first, and wring it into the Earth,
by twisting at each End of the Handle, He
must draw it out as often, as it has pierc'd a
new Depth of six Inches, to cleanse, and
examine the *Bitt*, and observe, what he
draws up in it.---If you find nothing but
common Earth, within the reach of this
first Auger, let him thrust the second down
the *Hole*, which was made by the former,
and proceed in the same manner, till he has
wrung This, also, up to its Handle; and
then let him do the same by the third Auger,
always

always remembering, that he examines the Auger *Bitt*, after each new Progress of six Inches.

By this means you will, undoubtedly, and without Charge, or Hazard, discover not only what *Marle* lies under your *Soil*, but whether any other Thing of Value, such as *Chalk*, *Coals*, *Fullers Earth*, or *Quarries of Stone*, many of which lie now conceal'd, and unthought of, in Places, where their Value, was it known, is ten Times more than That of the whole Estate, which covers them; and here, I can't help telling you a Story, which, tho' it may look like a Digression, makes much for my present Purpose.

A *Dutch* Ship was cast away upon the Coast of *Norfolk*; nothing was sav'd, either of the Vessel, or her Crew, but one poor Sailor, who had made a shift to get ashore upon some Member of the Wreck, and crawl'd along, half dead with Cold, and the Fatigue of his Deliverance, to the House of a *Farmer*, who liv'd not far from the Sea Side. It was in the heat of the War between Us and *Holland*, and the good Man of the

House, understanding that he was a *Dutchman*, imagin'd, 'twou'd be little less than high Treason, to entertain him ; by which means the poor Fellow, going on, in Hopes of better Fortune, was reduc'd to the necessity of taking up a good warm *Coat*, which he found upon a Gate, as he went along, and withdrew to a little *Copse*, with design to Shift, and dry his old Cloaths, and then to leave the Coat in the Place where he found it. The Owner of this unlucky Garment was a *Ditcher*, who, being at Work on the other side the Hedge, had observ'd this Passage, and, pursuing the *Sailor*, overtook him, before he got to the Copse ; and, not being able to understand his Excuses, for want of skill in his Language, wou'd needs carry him before a *Justice*, who liv'd hard by : The Justice had Knowledge enough, in the *Dutch* Tongue, to unriddle the whole Affair ; took Pity on the poor Man, and, putting him to Bed in his own House, gave him a Suit of Cloaths, the next Day, and was preparing to send him to a Place, where many of his *Countrymen* were Prisoners, expecting daily their Freedom. In the mean while,

while, understanding that he had Skill in *Draining*, he carried him one morning into a Field, in which he had begun a Work of that Nature. The *Dutchman* perceiv'd a whitish kind of Earth, which had been cast out of one of the Trenches, and examin'd it with more than ordinary Earnestness. The *Justice* ask'd him, if it were of any valuable use in *Holland*? The *Sailor* answer'd, that it was sold in his Country, at an extraordinary Rate; that it came to *Delft*, and other Places, down the *Rhine*, from a little Village about twenty Miles above *Frankfort*, and was us'd for making the finest sort of *Earthen Ware*. The Justice upon the Informations thus accidentally given him, immediately, after Conclusion of the Peace, sent a Person to *Holland* with a *Sample*, and, finding the Matter exactly, as it had been represented, by his Shipwreck'd Guest, became a Merchant unexpectedly, by this Product of his own Land, and sold so much, in a few Years space, as brought him in ten thousand Pound Profit; but the Stock was then exhausted; and he cou'd discover no more, in
any

any Part of his Estate, tho' he earnestly endeavour'd it.

But I return to my *Marle-Pitt*; and have only to add, that there is, now and then, an Inconveniency attending such who dig too deep in level Lands, inclinable to Wetness in the Winter; for the *Springs* will, sometimes, break in upon your Pit, and much encrease the Labour of your Workmen, and your own Expences. There are little Engines to be made, which, turning in a semicircular Frame, will catch the Wind at every Point, and, by the Force of their Motion, pump up mighty Quantities of Water, and, by that means, ease this Inconvenience, which, however, had much better be prevented; and that may infallibly be done, by working *Wide*, and *Shallow*, in such Places, as you suspect to be Watry.

I come next to *Chalk*, which, tho' not so general as *Marle*, is yet very easy to be found, in many Places, where 'tis never sought for. This is a Thing so universally known, that I need not go about to Describe it; only, as it is the *Heart* of many Hills, in *England*, whose *Surfaces* discover nothing like

like it, I wou'd advise a diligent Search for *This*, where *Marle* is wanting. The Augers will be, here, as necessary, as before; the Places, to be pierc'd, are only *Tops*, and *Sides* of Hills. If you succeed, you need not dig a *Mine* in the laborious manner, which is commonly practis'd; the following Method is a cheaper, and far more expeditious way.

Pretty near the *Top* of the Hill, (more or less so, as the Hill is high, or low) you must make your Workmen cut a deep Hollow into the Side, as if they wou'd undermine it; which having done, they must, upon the *very Top* of the Hill, dig a deep, narrow Trench, as directly over the inmost Part of the Hollow below, as they can possibly: This Trench they must contrive to fill with water, by cutting little Channels, to lead Floods into it from all the higher Parts of the Hill's Top; by which means the next Rains, that fall, soaking thro' the expos'd body of the Chalk, will at once carry down, as it were, the whole side of a Hill, which, breaking to Pieces in the Fall, may be carted in the Bottom, and carried out upon your Grounds, with abundance of Expedition.

Fuller's

Fuller's Earth is found by the same manner of Search, with the two foregoing; and, I believe, I may venture to give it, as a general Rule, that, where *Marl* is not, *Fullers Earth* is. The Places, to be examin'd, are the same in seeking one, as if you sought the other; and 'tis no great matter *Which* you find, if you can come at *Either*; for their Use, and Operation, are as near alike, as possible.

Clay is another excellent Manure, and easy enough to be found in all Places; but you must observe, 'tis only useful upon *Sandy* Grounds, or any Lands, of a Nature entirely different from its own; among which you may reckon *Gravelly*, or *Pebbly* Soils. To these it brings the only part of Excellence they naturally want, and consequently, changes them, from what they were Originally, to an equal Fertility with the best, and richest.

This will, perhaps, be strange News to many Countrymen, who have bought *Dung*, all their Life-Time, to destroy their Land with. 'Tis as great a Folly to *Dung* Grounds, which require *Cooling*, as 'twould be thought to

to administer *Poison*, to cure a Man of a *Fever*. Our Farmers are not sensible, that the *Temper* of the *Land* must, as necessarily, be consulted, as the *Pulse* of the *Patient*. The Dunghill only is their universal Refuge; they fly to *That* upon all Occasions: They miss a Crop, by dunging an improper Soil, and lay on more Dung, to remedy the Misfortune.

Some few Years ago, a Friend of mine remarkably experienc'd the full Sufficiency of this Observation: He had a couple of Fields, divided by a Hedge only; neither of which was fit for Corn, or Feeding: He resolv'd to improve them both, and when they were Plow'd up to that Intent, he found, that one was a hard brown *Clay*, and the other a very burning *Gravel*; He was surpriz'd to find these diametrical Opposites, such Neighbours; and suppos'd, that, for that Reason, the Hedge had been formerly made to separate them. He pull'd down the Division, and having laid them open, set his Men to work, on trenching them six Inches deep: The Earth, they dug out of one Trench in one Field, he made them carry
instantly

instantly to another Trench in the other Field, in Wheel-barrows ; by this means interchangeably mingling the *Gravel* with the *Clay*, and the *Clay* with the *Gravel*.---When this was done, he had it Plow'd all over by a deep cutting Plow, and has sow'd it every Season since with the richest Grains : The Effect of this is, that He has not now a finer, or more mellow Piece of Ground in his Estate : The very *Nature* of the Land is alter'd, and there remains no visible Difference between the two Divisions, but the whole is converted into a good *Hazel Mould*, and produces a plump round Corn, and as plentiful Harvests, as any Soil, in the Kingdom.

I distinguish *Sheep Dung* in the next Place, not as it is us'd in the general way of *Folding*, but as I wou'd have it us'd : And, as it wou'd produce so great an Advantage, that in a few Years, we might hope to see the bare, and open Downs of *Berkshire*, *Wiltshire*, *Dorsetshire*, and other Counties, nay, the barrenest Heaths of *Staffordshire*, and the very Mountains of *Wales* herself, become as good, and fruitful *Arable*, and *Pasture*, as they are now unfruitful *Wastes*, and *Desarts*.

These kinds of Downs, and Heaths, are commonly barren, even in the utmost Extent of the Word ; because it is not often, they afford the natural Helps, before-mention'd, whereby, they might by Industry be easily improv'd. I, therefore, *doubly* recommend the Manure, I am going to speak of, to the Owners of *such Places*, who may readily obtain it in what Quantities they please, because they only serve for *Sheep Walks*.

Let every Owner of a considerable Flock, in two convenient Places on his Sheep-Walk, build a Fold, of Bigness to contain his just Number, in this manner : Let the Frame be made of Poles, or Posts, about twenty Foot high, and being Roof'd, and Thatch'd, let him board it, on every Side, but one. The form may be an oblong Square, and which End he pleases left open. Into this new fashion'd Fold, let the Sheep be driven every Night, and the open End shut up, by such hurdled Barriers, as the *common* Folds are made of.---While they are feeding, in the Day time, let the Shepherd, instead of being Idle, by the help of a Spade, and Wheelbarrow, carry into the Fold such
Earth,

Earth, as he can dig, in the properest Places, near it, and scatter it abroad, till he has cover'd, in a manner, the Dung, which the Sheep had left upon the Place. This is the whole Design at one view, and this Work being daily renew'd, the Sheep will lie higher, and higher, as the new Earth raises them ; and, by their Dung, and Urine (the Virtue of both which are thus preserv'd from the Exhalation of the Sun, and injuries of Weather) will enrich the Soil to such a great Degree, that there is nothing, which you may not Hope from it.

This Manure may, at proper Times be carried out upon the barren Lands, which ~~may~~ gradually be enclos'd, by such Parcels, as the Fold can afford Compost for. I need say no more, the Thing will Speak itself : The Sheep's Dung is not only encreas'd to many times its Quantity, but also becomes a far more natural, and lasting Improvement to any Soil, it shall be us'd on. This Caution only is necessary, that the Dung, design'd for *heavy* Grounds, must be mingled with a *light* Earth, and so the contrary ; and it is for this Reason, that I mention two
Folds,

Folds, which Direction, notwithstanding, is to be observ'd in no Place but where there are two distinct Soils, upon one and the same *Sheep Walk*.

Sea-Owse, that is, the settling of the Tides, on Shores, and level Places, between low, and high water Mark, is a Manure of incomparable Excellence, for many sorts of Lands; but is, on others, to be avoided, as a certain Bane to whatever Part thereof 'tis mix'd with.---Where to apply it shall be shewn, in its proper Place, and how to find it needs not be taught such Land Owners, who live near the Sea, and are the only Men, to whom its Benefit can reach, tho', perhaps, the most unwilling to make Trial of its Virtue.

All Rivers, great, or small, abound in Store of *Mud*, which is nothing less, than the very Heart, and Fruitfulness of Uplands, wash'd down by Floods, and carried on by Streams, till, rolling into Rivers, it is settled on their Sides, and Bottoms, and remains an easy Prize to the Industrious, whose Labour it repays a hundredfold; and is of infinite Advantage, and yet every where neglected.

I might say the same of cleansing of Fish Ponds, and the bottom of Marsh Ditches, which is, also, of extraordinary Emolument to Men, who have Skill to hit the Quantity, and apply it rightly.

When I spoke of *Sea-Owse*, I shou'd also have mention'd *Sea-Sand*, to which not any of the former is preferable. This is a valuable Fund of Plenty, which, tho' surrounding us on every Side, is only made use of in one Corner of the Kingdom.---I cou'd tell almost incredible Examples of what Men might expect, from an Improvement of their Lands this way; nor is it any particular kind of Sand, which may be thought endued, with a peculiar Efficacy, but every common Part of that vast Sea Shore, whereby we are encompass'd.

There is yet another Friend to Vegetation, which the Sea, indulgent to our ungrateful Soil, throws in upon us; and which we leave to be regorged by every returning Tide.---I mean a certain floating Substance, which is torn, by the force of Waves, from the sides of Rocks, on which it grows, and lies, in great Quantities upon the Coast. It
may

may be found in all Creeks, and Rivers, to which the Sea has Entrance, and is commonly call'd *Ore-Weed*, and by some *Sea-Weed*. It is of wonderful use upon most Lands, and deserves a far greater Value than we put upon it.

And now, I think, 'tis almost demonstrable, that there are very few Estates, in *England*, so unhappily situated, but that some *one*, of the abovemention'd *Manures*, may be found about it. But, because it may be ask'd, if I wou'd utterly banish the Use of *Dung* from among us, I answer, *No*: ---But will endeavour to direct a means, whereby it may not only be us'd with much less Danger, than at present, but to many Times the Profit, which it now produces.

Along the Back of your Stable, cause a Pitt to be dug, to the Depth of the Foundation, or a pretty deal below it; let it be as long, as the Stable, but its Breadth shou'd be according to the Quantity of *Dung*, you have Conveniencies for making: Let this Pit be arch'd with Brick, but very slightly, and an Entrance left at one End, which may be shut up, or open'd, by a wooden Door:

Let the Sides, and Bottom be firmly lin'd with Stone, and closely plaister'd over with a Cement, which will by no means admit Moisture.

Though the Wall of this Stable, and about a Foot, or more from the Ground, let there be made square Holes, which opening into the Stercorary, from within the Stable, must be of sufficient Largeness for the Passage of the *Dung*, that is, from Time to Time, to be Shovell'd through them.

The Stable Floor shou'd be made as smooth and hard, as possible, that the Urine of the Horses may not soak into it, but, descending from them to a little Gutter, close along the Wall, thence run through Passages, which are purposely to be made, into the Stercorary.

Pipes of Earth, which will cost but little, shou'd be laid, from this Place, to the *Cow-house*, *Hog-sties*, and *Privies*, that all Urine of Man, or Beast, of any kind whatsoever, may immediately be convey'd to mingle with the other. Into which must be cast all *Ox Dung*, *Cow Dung*, *Hogs Dung*, and *Dung of Fowls*; all *Ashes*, whether of Wood, or Sea-



Sea-Coal ; the Dust, and Sweepings of your Yard, and House ; all *Weeds*, old *Litter*, rotten *Straw*, and spare *Earth*, which you can get ; as also the washing of *Barrels*, all *Soap-Suds* ; *Water*, which *Meat* has been boil'd in ; *Dish-Water*, and every such kind of Thing, which is now thrown down the common Sink, and render'd Useless : And, for the more convenient Performance of all This, there may be left a pretty large square Hole, in the *outward Declivity of the Arch*, which covers the Stercorary : This Hole must have a wooden Door fitted to it, which, lifting up and down, will, as occasion offers, not only serve for taking in the Things above nam'd, but, whenever, more Moisture, may be thought wanting, it will admit as much, as is convenient, by being left open in rainy Weather, and, as soon as shut, forbid the Entrance of any more. The other Door, which I spoke of, in one of the Ends, is only to serve, for carrying out the *Dung*, when it is to be made use of.

In such a Stercorary, as is here describ'd, the Charge is a Trifle, not worth naming, in Comparifon with the Profit. The Dungs,

and other Things, incorporating, and fermenting thus together, mellow'd, and enrich'd by the Spirit of the Urine, and unimpair'd by the Sun, Rain, or Wind, attain an Excellence, which is best known by the prodigious Encrease, they make in your Crops; and which demonstratively proves, that *one* Load, thus manag'd, is of more Effect, than *twenty*, after the common manner.

I may reckon *Burning* of Land among *Manures*, because it is a very great Improvement, and only practis'd upon some old *Pasture*, or *Heathy*, *Rusby*, *Broomy*, and such like barren Grounds, which are greatly enrich'd by it; though, for want of one Observation, Lands, so improv'd, are generally ruin'd, in the common Practice of Plowing them, three or four Crops, successively; by which means their whole Fertility is most assuredly, exhausted, and the Soil becomes incapable of Vegetation, though assisted by the richest Dung, or other Manure, in the World. Nothing, but ten, or fifteen Years Repose, will restore the abus'd Vigour of Nature; whereas, were these Grounds
strengthen'd

strengthen'd by a little *Marle*, *Chalk*, or *Dung*, between their first Harvest, and their second Seeding, the Improvement wou'd be made compleat, and lasting: No Method wou'd be more easy, nothing possibly more advantageous.

The manner of burning Land is generally known to be a paring off the fibrous Turf, to a considerable Depth, in a hot Season, which being made into little Hills, rais'd hollow, and at equal Distances, are set on Fire, as soon as they are dry enough to kindle, and so burnt to a kind of red Ashes; and those Ashes scatter'd over the whole Surface; the Ground is then plow'd up very shallow, and the Seed immediately sown.

This burning of Ground is very costly, and not a little tedious, because the Turf is rais'd in a laborious manner, by the Force of a Fellow's Arms, and Bosom, pushing against a Thing they call a *Breast Plow*.--- I will present you with a much neater Invention, and which saves, at least, two Thirds of the Charge.

Let some *Smith* in your Neighbourhood, who is a ready Workman, make a hollow

Plow share, of a double Form, that is, one which rises with a sharp Edge in the middle, from the Point to the Top, and has a *Fin* both ways; which Fins must also begin at the Point, and so run back to the share End. The Dimensions of this Share will be two Foot broad, from the extream Points of the Fins behind; one Foot long, and a Foot high, somewhat like a three-edg'd Sword, if it were cut off a little above the Point. The three Fins, or Edges must be very well Steel'd, and the whole made as thin, and as smooth, as you can get it done.---Into the hollow of this Share must be fasten'd a light strong piece of Ash, sharpen'd *forward*, to fit the Bosom of the Share, but *behind*, as square, and sturdy as may be. Into this last Part must be fix'd a strong piece of Wood, like a *Lever*, not perpendicular, nor very far from it, but somewhat hanging backward: It must be about two Foot high, and on the upper End, shou'd have a cross Staff, or other Contrivance, to which must be fasten'd the Harne's of such Cattle, as your Team consists of. The Handles of the Plow, and the *Earth-Boards*, to turn the Turf, are also
fix'd

fix'd into this square Head ; and, there is no manner of Instruction necessary for the use of this Plow, but that, when you begin upon the edge of a Field, and turn one Turf to the Hedge, and the other to the Field, the last will cover one of the Breadths you must take at your coming back, and the Point of your Share must, therefore, run close along the edge of this length of Turf, by which means one side of your Plow will raise two Lengths, and, throwing back the highest, lay that uppermost, which had before lain under : And by this one Observation, you cannot miss the manner of Plowing.

But, because this wou'd only raise a long unweildy *Rope* of Turf, which it wou'd be necessary to cut into many hundred Pieces, before it cou'd be fit for *Piling*, you will find the following *Invention* of admirable Use, and Expedition.

Chuse the Body of a short thick Tree, the heavier, and more solid, the better ; let it be neatly rounded, and work'd into a *Roller*, like those, we use for levelling our Barley Lands. This Roller must be hoop'd round,

round, in six several Places, each two Foot distant from another; the Hoops must be of strong Iron, and nail'd very firmly on.--- The middle Part of every one of these Hoops must rise into an Edge, to about five or six Inches above the Level of the Hoop itself; these Edges must be very sharp, strong, and well steel'd, that the weight of the Roller, as it goes round, may not fail to press them all into the Earth, as deep as they can go, and yet not damage them, either by blunting, bending, or breaking.

One Horse will very well draw this Roller, with which you must go over the Ground, you intend to burn, the contrary, or *Cross* way to that, which you design to take with your Plow, before describ'd; which will by this means, turn up the Turf, in Pieces of two Foot long, and one broad, the exact size, they ought to be, to form the little Hills above-nam'd. I have nothing to add upon this Head, but, that Those, who practise it, had need be careful how they *over burn* the Turf, which wou'd, in that Case, be robb'd of much of its Fertility. A gentle Fire, not flaming out, but moul-
dering

dering inward, is the surest means of hitting the Perfection of this Work.

I have now provided a sufficient Store of Manure, and come next to consider, how to plow the Ground, on which it is to be bestowed; and, this Work finish'd, I will wind up my Directions, in as narrow a Compass, as will contain 'em.

There is no occasion for more *Plows*, than two; one, for a *hard*, or *heavy* Soil, and the other, for a *light*, or *mellow*. There are, in *England*, above a hundred several sorts of Plows, and all bad: It is surprizing to see the Toil, and Charge, some People put themselves upon, for want of a compleat Knowledge in the *make*, and management of this useful Instrument.---I have seen eight Oxen tack'd to a Plow, which the weakest Beast in the Team wou'd have easily drawn, in a Soil, much heavier.---I distinguish the only two Plows, worth using, by the Names of the *Strong* and the *Light*.

The *strong* Plow is to be us'd on all *hard* *Clays*, *stiff binding* Soils, and *stony* Grounds, or any Lands of a *repulsive*, or *sticky* nature.---It is drawn by *two Oxen*, nor are more,
at

at any Time, necessary. The Description follows.

Let the length of your *Share* be a Foot and a Half, the Point indifferently sharp, but very strong; let the Shelving-side be work'd thick, and without a *Fin*, but steel'd all along its Edge, from the Point to the hinder Part, where its perpendicular Height must not exceed six Inches --- The Breadth must be just sufficient to carry a Furrow, seven, or eight Inches broad. In this Plow, the Place of the Breast-board must be supply'd by an Iron Plate, which, joining to the Share, and being Part of it, is, in a bellying manner, carried back, and gradually brought to *Whelm*, as if it wou'd fall upon the Furrow. This Plate, being made as thin, as its Use will permit, is supported by a Pin from the Plow-Head, which is, in all Respects, the same with that of the Plow, which I just now, recommended, for paring up the Turf of Lands to be burnt.--This Breast Iron, with all the Neatness and Facility imaginable, takes the Earth, as it rises on the Share, and, without labouring under the Load of a long Furrow, turns it

it over, as it runs along, and neither toils the Oxen, nor the Driver.

One Man is enough in all Reason to manage this Plow ; He guides his Oxen by a Goad, as usual ; and holds the Handles with a great deal less Fatigue, than in other Plows, for they are to be set at a large Slope, and their Ends standing wide from each other, they have the greater Power over the going of the Plow : If the Share is apt to *bite*, or run too deep into the Ground, his leaning a little harder than ordinary, on the Handles, will raise the Point to what Pitch he pleases ; as, on the contrary, when he lays no stress upon them, the Team will of Course draw the Point downward.

The Oxen, while out of Business, may feed at large, or be us'd at Pleasure ; but when you work them, 'twill be necessary to keep them up in a Stable, or some Stall, built purposely for them.---Hay, and Straw, mix'd, is what will very well content these easy Creatures, but they deserve to live in Clover, and pure Hay is what they will very gladly feast on.--Your Men shou'd make two Journies in a Day, let the Seasons of your
Plowing

Plowing vary, as they will ; the first, from Day Break, to eleven o' Clock, and the second, from one in the Afternoon, till Night. This is what your Oxen, with the Help of their two Hours Bait, can very easily perform ; but your Plowman, who is generally the worst Beast of the Three, may, perhaps, think much of his Labour.

The *Light* Plow is properly to be us'd, on sandy mellow Grounds, and all such, as are directly opposite to those, for which the *strong* Plow is recommended. It is drawn by two Horses with no manner of Difficulty ; or with one, if you please, for many have try'd it.

The *Share* of this Plow is, in a manner, the Share of the *Turfing*-Plow, divided into two equal Parts. The Share of the *Light* Plow shelves only one way, as not being double, and has a *Breast-Iron* exactly like that of the *strong* Plow ; in all other Respects, it is the very same with the *Turfing*-Plow, even in Dimensions, and, therefore, needs no farther Description.

One Man will hold, and drive this Plow, with more Ease, than the strong one, because

the Lands are more manageable. The Reins, whereby he turns, and checks the Horses, pass through two long Slits, in each Handle one, and being just of Length enough to hang five Inches, or more, down, are prevented from being drawn back through the Slits, by two pieces of Wood, to which their extream Ends are fasten'd.

I need not tell you how the Horses shou'd be fed, and kept; that Skill is common.--- I observe only, that *Horses*, if you feed them well, are as able to go two Turns a Day, as *Oxen*. It may not, perhaps, be generally known, that a Horse is apt, by rising in the Night, and falling to the Rack, to pull down, and spoil great Quantities of Hay, whereby he does not only commit Waste, and Damage, to his Master, but deprives himself of that needful Rest, which wou'd have qualified him much better for the Labour of the succeeding Day. You may easily prevent this Inconveniency, by emptying the Rack, at Night, by which means the Horse, when he rises, and finds his Expectation baulk'd, will content himself to lie down again,

again, immediately, or stand, and sleep, as he shou'd do.

I can't introduce a very useful Observati-
on in a more proper Place, than This ; and
that is, when the Land you are to Plow, is
the side of a very steep Hill, as it often is,
'tis downright Madness to proceed, as most
Countrymen do, by Plowing directly up and
down the *Steep*. In this Case, 'tis Pity the
Driver is not in the Place of his Team ; He
wou'd then, perhaps, discover, that 'twould
be the wisest way to Plow cross the Hill, by
which means, the Cattle wou'd not only
draw with the same Ease, as if they work'd
on plain Ground, but the Furrows, lying
athwart, wou'd prevent the Rains from wash-
ing down the Fatness of the Soil, with every
Flood ; a Misfortune, to which, at present,
all these Lands are yearly liable, and often
ruin'd, and impoverish'd by it. But, I haf-
ten, as I promis'd, to direct to as full a
Knowledge, as is necessary, in the general
Practice of Husbandry, to a far greater Pro-
fit, than is now made by it.

As for the general Difference of Soils, I
divide Ground into two sorts, the *Good*, and
the

the *Bad*: The *Good*, as being such already, I intend not to discourse of, aiming only to instruct the Gentlemen of *England*, how to make the *worst* Part of their Estates, of equal Value with the *Best*; and, in the Rules laid down, in order to the attaining this End, include a practical Description of the *compleat Art of Husbandry*.

Common, and indifferent Lands then I distinguish into *Heavy*, and *Light*, and comprehend, in this Distinction, every particular difference of Soil, which is known in this Kingdom. All deep, hard Clays, of what Colour soever; all stiff, chalky, binding Earths, and such, as after being expos'd to the Sun, or Frost, grow hard, and stony with such, as, in the violent Heats of Summer, chop, and cleave upon their Surface; all these I call *Heavy* Lands, not only because of the closeness, and firmness of their Nature, but as they all hang *heavily* on the Labour of the Plowman, and his Team.

On the other side, all sandy, mouldering, gravelly, warm, mellow, Soils, all loose, and open Earths, of what Nature soever; all such, as are not sticky, but will presently

L

d y

dry after Rain, and, instead of lying in huge Clumps after Plowing, are easily apt to dissolve, and crumble into Mould, not being subject to bind by the Heats in Summer, and Frosts in Winter ; all Grounds of this kind I distinguish by the Name of *Light Lands*.

I will describe the particular Process necessary for each of these Soils, and, that I may the better comprehend the whole Art in my Directions, I begin them both in the Turf, that so following them from the first breaking up, to the utmost Extent of their Improvement, I may omit nothing, that a Practiser ought to be instructed in.

Let us suppose then, that, at *Lady Day*, you begin your Husbandry, and that the Quantity of Land you are about to break up, is a hundred Acres ; the first Thing necessary, is, carefully, and judiciously, to observe both the *Surface* of your Ground, and the *Depth* of it : If you find it a good deep Mould, and cover'd by a thick, strong, fibrous Turf, such as by long lying, is become firmly rooted ; In this Case, it will be much the wisest way to *burn*, and spread the Ashes, by the Rules before given, not, by
any

any means, omitting to manure, between the first *Reaping*, and the second *Sowing*; after which you may proceed, in all Points, as if the Turf had been Plow'd in, instead of being burnt.

But if, on the contrary, you find your upper Mould shallow, or thin Turf'd, it will by no means be proper to burn it; you must, therefore, take Notice, whether your Soil be of the *Light* Kind, or the *Heavy*; if, upon the examining it by the Marks abovemention'd, you find it of a *heavy* Nature, you must prepare your *strong* Plow, and Ox Team, and take Care, that, in the first breaking up, as they call it, your Plowman turns the Turf side neatly downwards, and lays his Furrows so smooth, and close together, that, at a little Distance, a Man can scarce see where the Plow went. An Acre, and a half may easily be Plow'd in one Day, by the use of this Plow, so that, beginning by the first of *April*, and allowing for *Sundays*, and accidental Hinderances, the hundred Acres will be all broke up, by the middle of *June*, at farthest.

Between this first Plowing, and the second, is the only proper Time for laying on your *Manure*, of what kind soever. The several sorts, proper for Lands of this Nature, are *Sea-sand*, *Common-sand*, *Sea-owse* of the lightest Kind, not such as is black, and greasy; *Sheeps-dung*, mix'd with *Sand* under a cover'd Fold, as before describ'd; or, for want of any of these, the *Compost* in your Stercorary.

Which ever of these you lye most convenient for, you may make use of, in the following Proportions: Of *Sea-sand* you must lay upon every Acre, five and twenty Loads; Of *Common-sand* never less than a hundred, which Quantity you may double, if it lies commodiously: Twenty Load of *Sea-owse* is sufficient; and fifteen of *Sheeps-dung* so mingled: And, if you are obliged to relye upon the Assistance of your *Stercorary*, you must lay about twenty Load upon an Acre.

According to the *Manure*, you are oblig'd to use, your Charge will be more, or less considerable in the number of Carts, and Teams necessary; for this Rule you must be sure to observe punctually, that the *Manure*
be

be all laid on, by the last Day of *July* : In which Time the Plowman, a Labourer being employ'd in spreading the *Manure*, as it is daily brought on, does, with the same Plow he us'd before, give the second stirring to the Ground, in order to turn in the Richness of those Helps, you have bestow'd upon it. By this means the Sun, high and powerful in this Season, will be prevented from exhaling the *Virtue* of your Manure, as it always does in the Common way of letting it lye, in little Heaps, on the Field, for a great while together.

You may observe, that I allow a shorter Time for *this* Plowing, than for the *first* ; and the Reason is, because the Ground having been broken up before, and the Turf now rotten, it is become more Mellow, and the Draught so much easier, that a Team may dispatch almost a double Quantity in a Day.

It is now the time to *Harrow* over your Ground, with a heavy wide-tooth'd Harrow, and a great Weight laid upon it ; by which means more Mould will be rais'd, the Clods broken into smaller Pieces, and the Manure

mingled with the Soil in every Part. It is not enough to Harrow once, and away ;--- You must go over the same Ground, again and again, till you have made it as smooth, and crumb'y, as is requisite. And this Work will very well employ your Team, from the end of *July*, to the middle of *August*, about which Time shou'd be begun the third, and last Plowing.

This Time, which is commonly call'd *Seed-Plowing*, the Team shou'd go a cross the former Furrows, and turn up the Earth in different Lines from those, which were made by the two former Aratures : This Work will be finish'd about the end of *September*.

Now, let your Corn be sow'd, and let it be *Wheat*, after the Rate of two Bushels upon every Acre ; when the Seed is on the Ground, let your Team be fasten'd to another kind of Harrow, not so heavy as the former, and whose Teeth are small, and very close to one another ; by the Help of which the Grain will be all cover'd by the Mould, and lie pretty near to an even Depth ; two very great Advantages, in the Practice of Husbandry.

But,

But, here, two Cautions naturally offer themselves to your regard ; the first, as to the *Choice* of your Seed Corn, and the other, as to your *Preparation* of it ; either of which, though neither is generally observ'd, cannot, without great Damage, be neglected, whether in Wheat, or Barley.

Let your Corn be brought into the Corner of a large *Barn Floor*, or great *Boarded Hall*, such as few Country Houses are without ; order a Man, with a broad wooden Shovel, to throw the Corn, with all his Force, towards the opposite Corner of the Barn, or Hall, the last is generally the fittest for it :--- In this Exercise, all light, small, shrivell'd Grain, and the Seeds of *Cockle*, *Darnel*, and other *Weeds*, not being so heavy, as the solid Corn, will fall short, and lie nearest to the Man, who throws them, while such, as is large, plump, and weighty, outflying all the Rest, is separated widely, and may easily be gather'd in what Quantity you please.--- Experience only is capable of making Men believe the wonderful Advantages of sowing Seed, thus chosen.

Take your Corn, when it has been thus obtain'd, and throw it, by a Bushel at ~~a~~
L 4
Time,

Time, into a large Vessel full of Water ; let a strong Man stir it with a Staff, as violently, as he can, for a considerable while together, and then, giving it a little Time to settle, skim off all that swims upon the Surface ; and repeat this Labour, till no more rises ; after which, take out the Corn, which is sunk to the Bottom, and lay it by for *Seed*, proceeding in the same manner, till you have your intended Quantity.

Now, make a *Brine*, by throwing *Bay-salt* into *Rain-water*, till it becomes of strength enough to bear an *Egg* : In this Liquor steep your *Seed Corn* thirty Hours ; less Time will have no manner of effect ; observe this, and regard not the contrary opinions of any Men, let them pretend to never so much Skill.

When you take your Corn out of this Brine, spread it upon a smooth Floor, and, scattering upon it good store of the *fine-ground Powder of slack'd Lime*, sweep it up and down, and mingle it with the Corn, till every Grain leaves clinging to another, and becomes, as it were, *Candied* with the *Lime* : And, in this Condition, let it be *Sow'd*, never



ver entertaining a moment's Doubt, for the infallible encrease of your Harvest. -

Weeding wou'd, in this Case, be an unnecessary Instruction; for Grain, thus manag'd, and Ground thus order'd, will admit no Rival, till the Crop is down. *Weeds* are the exulting Triumphs of *Neglect*, or *Ignorance*, and the very *scandel* of our *Husbandry*.--- But Harvest comes, and, if you reap, and carry in, 'with the same Care, you have us'd, in the foregoing Part of your Labour, depend upon it, and you will find yourself agreeably deceiv'd, if you dont believe it, 'twill be no unlikely Thing, to count *two thousand Pound*, as the Produce of your *one hundred Acres*.

About *Michaelmas* after, take the Opportunity of a very dry Day, and moderately windy, to set Fire to your *Stubble*, in so many Places, as may serve to carry the Flames over the whole surface of the Ground, on which the Stubble of such a Harvest, as you may expect, by the management describ'd, will grow so thick, that the Ashes, and warmth of the Fire, will be as much Advantage to the Soil, as the best of your common

mon Dungings.---When you have done this, let the Land be Plow'd up in *Ridges*, and lye so, till the beginning of next *February*.

And here will come in a *Caution*, that, if these Lands lie very *flat*, and apt to be *watry* in the *Winter*; your Plowman must be directed to lay his Ground in *Ridges*, which every Country Fellow knows the manner of doing, though they are not so well acquainted with the Knowledge, that the general Ridging of all kinds of Lands for Winter Corn, as is commonly practis'd, is ridiculous, and, by no means, necessary.

You may take Notice, that, in such Lands, whose moist Nature requires *Ridges*, 'twill be requisite to make your *Harrows* the full *Breadth*, of a *Ridge*, and so contriv'd, as to clap close on each side of it, to prevent the Inconveniency of throwing down too much Earth into the Furrows.

But to return to our hundred Acres, which we left under a Rest, by Farmers, call'd a *Winter-Fallow*: Let your Plowman renew his Work, at the first coming in of *February*, and, Plowing across the old *Ridges*, lay his Ground in an uneven Surface, full of little
Hillocks,

Hillocks, and low hollow Places: And, in this Condition, let him sow it with Barley, the first dry weather in *March*, after he has done Plowing it; and then, Harrowing it well over, first, with the wide-Tooth'd, and then with the close Harrows, it will cover the Seed at a good Depth, and lie as smooth, and neatly, as possible.

I need not remind you, that you are to chuse your *Barley* Seed, and steep, and manage it, when chosen, with the same Care you us'd, in your Seed *Wheat*. Sometime in *May*, when the Ground is hard, and dry, it will be proper to make one Horse draw as heavy a Roller, as he can, over your Barley, by which Work the Ground is not only made level for the *Mowers*, but the Earth being press'd hard down, the Spires are check'd for some Time, and the *Roots*, by that means, spreading, and growing stronger, are the better able to shoot up a multitude of Stalks, and nourish a fuller Grain, and more plentiful Harvest.

This second Crop is a Grain, in *use*, and *price*, inferior to Wheat, and, consequently, will fall short of your first Year's Profit;
but

but a second Harvest of twelve, or fourteen hundred Pound, will be no despicable Reward of your Diligence, and you may oftner be disappointed by a *greater* Gain, than you will by a smaller.

As soon as this Crop is well in, Plow up the Stubble, and sow Wheat with the same Care you us'd before, Harrowing it well in : And there is no Reason to fear but you shall Reap as great an Encrease this Year, as you did the first.

But now we are come to the Pillars of *Hercules* : A third Year's Crop is a skilful Husband's *Ne plus ultra*, in the whole course of his Practice. One more Plowing works your Soil into an almost incurable Consumption ; but leave off, while all is well, and be but contented with the same Profit, by a different Application, and this single Prudence will make the value of your Land, as durable, as the Land itself ; while other Men, for want of skill in this essential Point of Husbandry, are forc'd to rest contented with a constant Income, and a poor one, or, for a present extraordinary Advantage, entirely ruin the future worth of their Estates.

To

To prevent this Fate upon your Land, as soon as your third Crop is down, burn up the Stubble, as before ; and, Plowing up the Ground with great Care, go over it with fine tooth'd Harrows, which may gather all the fibrous Roots, and other Trash together ; which being laid in little Heaps, and burnt, the Ashes must be spread about, and the Ground again Harrow'd to an exquisite Fineness.

When this is done, let the Ground be cautiously, and in a still time, Sow'd with *Clover*, not *English* Clover, but the Seed, which is brought from *Holland*, and *Flanders*, and may be had cheap enough, at most of the Seed Shops, in *London*.---You may know, whether the Seed be good, by trying it in Water, where, all that swims, is to be rejected. There is a certain *Fly*, which is sometimes known to eat this Seed in the Ground, but that Inconvenience is easily prevented, by steeping it, for the space of a Night, in *Soot*, and as much *Urine*, as will make it a *Liquid*. I desire, that one Rule may be particularly observ'd, and that is, never

ver to Sow lefs, than *twenty Pound of Seed* upon an Acre.

Many will object againſt this, as a double Charge, becauſe, *ſay they, I never knew any Man, who ſow'd above half that Quantity.*--- I answer, they never knew any Man, who Reap'd half the Profit, which he might have done by it, if they had follow'd my Directions.-- It is obſervable, that there are more ignorant Men, who profeſs Huſbandry, than of any other Art; and yet fewer of this Profeſſion, than any of the reſt, who think they can be *taught*. A Man, who was not poſſeſs'd of this Temper, wou'd eaſily imagine that the thicker this little Seed is ſown, the thicker it will ſpring, and the better keep down all Weeds, and common Graſs, and, conſequently, become of double Advantage.

Sowing *Clover* thus in *September*, inſtead of the *Spring*, and ſowing it alone, has many Conveniencies: It will riſe thick, and ſwath the Ground, before the hard Weather comes in, and thereby not only gather Strength, to defend itſelf againſt the Winter Froſts, but will be ſo *early* in the Spring, that you might Mow it, the firſt time, in
the

the very beginning of *May*, or, perhaps, sooner.

When the first hard Frosts have bound the Earth so fast, that you may bring Horses upon it, without Damage to the Roots of the Clover, this is the very Point of time, in which you shou'd bestow about eight or ten Load of *Sea-owse*, *Sea-sand*, *Sheeps-dung*, or that of your *Stercorary*, upon every Acre, taking Care to spread it as equally, as may be, that, when the Frost dissolves, the Rains may drive the strength of the Manure into the Earth, which, in the tender Infancy of her new Turf, will easily admit it, to the nourishment of the Roots, and surprising encrease of your Clover, both as to Quantity, and Sweetness.

Three Years your Clover, thus manag'd, will thrive amazingly, and produce an unexpected Profit ; but let not that tempt you to continue it longer. At the end of the third Summer, break it up, and, after two Plowings, sow it, in the Spring, with *Barley* : After the Barley, take two Crops of *Wheat* successively, and then, without *Manuring* it, lay it down with *Clover*. Always observe an
alternate

alternate Husbandry: Three Years *Plowing*, and three Years *Clover*, you cannot guess the Advantage, which will accrue, by a strict Adherence to this one Rule: Your Land, so manag'd, will forever retain its full Vigour, Yearly afford the largest Crops, and never fall under a Possibility of being work'd out of Heart: A Fate, which almost all the Lands, in *England*, are forc'd to submit to, by the present Practice.

I will add a little more, as an Instruction how to make the *greatest* Profit by your *Clover*.---Here again, I take the Liberty to lead you out of the *common* Road, as, indeed, I have done all along, and shall continue to do, till I have done with the Subject.---I write the Rules, which ought to be practis'd, and cou'd I contrive to make them as *general*, as they are *profitable*, I shou'd happily accomplish that *Publick Good*, which I aim at, in this Essay.

I shall neither advise to feed it with *Oxen*, *Sheep*, or *Horses*, nor to mow it for Hay, or Seed; nor any of those general Purposes, to which it is applied. There is a *Profit*, which exceeds them all, and yet was never practis'd,

practis'd, that I know of, but by two, or three Gentlemen, of my Acquaintance, and by my Advice, and Persuasion.

About the same time you sow your *Clover*, or a little sooner, sow ten, or fifteen Acres, in any Part of your Estate, with *Turnep Seed*, for a Use to be mention'd presently.

About the beginning of *March*, take your best Opportunity to buy three hundred *Sows* ; all such, as are to *Farrow*, in a Month, or thereabouts. In several convenient Places of your *Clover Ground*, let there be made little *Sties*, which may be easily form'd of *Boughs*, or *Reeds*, in the Corners of Fields, and under the Hedges. In these *Sties* let your *Sows* be kept up, and fed daily with the *Turneps*, which you sow'd the *Autumn* before : At first, you must be at the Trouble of boiling them, Tops and all, and giving them in the Troughs with the Water not yet cold ; you may afterwards but just *scald* them, and so, in a Week, or ten Days, they will eat them *raw*, with the greatest Greediness, and Pleasure imaginable.

In the beginning, or about the middle of *April*, these *Sows* will *Farrow* ; which ha-

M

ving

ving done, you must continue your *Turnep-feeding* no longer, than till the *Clover* is pretty high ; and then let the *Sows*, with their *Pigs*, run at Liberty among it. 'Tis impossible for one, who had not seen it, to imagine with how much Eagerness the *Swine* will graze on *Clover* : The *Milk* is hereby so strangely encreas'd, that the *Pigs* shoot forward at a double Rate, and, as they leave off sucking, take to feeding on the *Clover* with a wonderful Delight ; by which they prosper so fast, that every *Pig* will, by the end of *October*, be readily sold, in any Market, for *twenty* or *five and twenty* Shillings. The Treading of *great Cattle* is apt to break the stalk of *Clover* Grass, and *spoil*, by trampling down, a much greater Quantity, than they *eat* : But *Swine* are never hurtful this way ; and, if you fear their *Rooting* up the Ground, you easily prevent it, by a Ring in their Noses, though I never knew a *Hog* break up an Inch of *Clover*.---They graze here with more Pleasure, than they cou'd *root* : But there is one Advantage, which is inimitable by any other Practice ; their *Dung*, which, in direct Opposition to the vulgar Error,

Error, is the best, and sweetest of all other, does, in their three Years pasturing upon the Soil, so wonderfully enrich it, that it will never need additional Manuring, but produce prodigious Plenty of whatever Grain you sow it with.

See here, then, a Practice preferable, every way, to what is commonly follow'd: Will they object 'tis *chargeable*! How poor an Argument is that, when they oppose it to the *Profits*: Will they allow *six* Pigs to every Sow? They cannot contradict such a moderate Expectation; will they admit them to be sold, at seven or eight Months old, for twenty Shillings? Perhaps, they'll say, it is too much; I answer, No; it is too little: The Sows will yield forty Shillings a-piece from those, who buy for Bacon; and, at that Rate, three hundred Sows, and eighteen hundred *Porkers*, will, upon your hundred Acres, produce, every Year, four and twenty hundred Pounds.

They are amaz'd!--and they have Cause! This, tho' a Secret, undiscovered by our Croud of Husbandmen, is plain, is easy; and, set aside *Experience*, 'tis demonstrable

by common *Reason*; yet was it never practis'd, and will, even now, be oftner *ridicul'd*, than *imitated*, till it becomes as common, as the *Spade*, or *Dung-Fork*.

Let it not be objected, that I make no Allowance, for the Deaths, or other Casualties, unavoidable in such a numerous Herd; I have prevented it already: Why else shou'd I allow a Sow but *six*, when she is commonly known to *double* that Number? If 'tis urg'd, that eighteen Swine will overstock an Acre; 'tis a mistake, and will be found so in the Practice. But then, by the way, allow a Difference, betwixt Clover *their* way, and Clover *mine*.

I have done with the *heavy* Grounds, and come now to your Lands of a *light* Temper. ---For method's sake, we will begin at *Lady Day*, upon this Land also. Here the *light Plow* is to be us'd, and, as to the turning down the Turf, and laying smooth the Furrows, the same Care is to be observ'd on one Land, which is recommended on the other. Of this Work, two Horses, with the Plow aforementioned, will constantly break up two Acres a Day; and, beginning
with

with *April*, and allowing as before, for Sundays, &c. the hundred Acres will be very well Plow'd, for the first Time, by the latter end of *May*.

Betwixt the *first* Arature, and the *second*, these Lands are, also, to receive the natural Recruits, which you think fit to give them; and that may be either *Chalk*, *Marl*, *Clay*, *Sheep's Dung* prepar'd with *Earth*, not *Sand*; *Sea-Owse*, of the closest, black, fat kind; all sorts of *Mud*, or, for want of either of these, your *Stercorary* may supply you.

Five and twenty Load of the last, is the Quantity most proper; thirty of *Chalk*; of *Marl*, at least a hundred; and of *Clay*, a little more. Twenty Load of prepar'd *Sheep's Dung*, and as much of *Sea-Owse*; and, if you use *Mud*, less than forty, or fifty Load will be too little. Use either of these Manures, as your best Conveniency invites you, and, as was directed before, take Care, that your Plowman turns it in, as fast as it is brought on, and spread upon the Surface.

But here comes in a necessary Caution, that your Men begin to bring on the Manure on that end of your hundred Acres, which your Plowman first began to break up, that the Turf may be rotted, before it is turn'd up the second time.---Be regardful of this Rule, or you will find the Neglect of it produce a great deal of Confusion.

When the Manure is all turn'd in, bring on your heavy Harrows, and go over the Land so often, as till the whole Mass is exquisitely mingled, and the Mould becomes fine, and dusty: You must be *doubly* careful in this Operation upon your *light* Lands, which ought by the Harrow to be laid as smooth, and level, as a *Table*.

About the beginning of *August* will come on your *Seed Plowing*, properly so call'd upon these light Lands, because you must here *Plow*, and *Sow* together. As to the Seed Corn, the same way of chusing, steeping, and preparing, which was directed for the *heavy* Ground, is as necessary, and as advantageous upon this also: But the way of *Sowing* differs widely.

Let



Let one Man, with a Hopper full of Seed, walk down in one Furrow before the Plow, which follows him close in another :---This Man must drop the Corn, by little and little, as he goes along, directly in the Bottom of the Furrow, which will be presently cover'd at an equal Depth by the Earth, which the Plow throws out of the other Furrow.---By this means, the Corn will spring thick, and in Rows, about a Foot asunder, which, meeting at Top, like an Arch, will permit no Weed to rise under them.

Less than two Bushels of Seed will be enough, in this way of Sowing, and the Ground will need no Harrowing after it. The Birds will devour none of the Corn, nor can the Frosts destroy any; both which Inconveniencies the other way is subject to; but you must note, that only *light, mellow* Grounds are capable of this Management: A *heavy, binding* Soil wou'd choak the Grain, before its tender Spires cou'd find a Passage through it.

An Objection may be rais'd, *that I suppose all Soils are fit to bear Wheat.*---I own it; and will affirm, with a just Contempt of the

Slothful, and the Diffident, that, by Labour, Skill, and good Manuring, a Man may reap Wheat from a *Rock*. No Ground is unfit for any kind of Grain, but through the Ignorance of its Proprietor: Earth is a passive Body, and will change its very Nature, in obedience to the *Tiller's Art*. *Virgil's Non Omnis fert Omnia tellus*, is only meant, that all Earths, in their natural State, are not fit for every Grain, but that judicious Cultivation is necessary to bring them into such a *general Capacity*.

It is to be understood, that the third Plowing, just now describ'd, is to be made across the Fields, directly contrary to the two former, as was directed in the Discourse of *heavy Soils*.

When the first Year's Harvest is over, which, in these Soils, will be very early, burn up the Stubble, as was taught before, that the Ashes may fall upon the Surface, to the Benefit of the Land they cover.

But here is another Husbandry to be practis'd.---You must, besides your *Barley Roller*, cause another to be made, and stuck pretty full of strong, sharp, iron Pegs, that,
as

as the Roller goes round, may pierce the loose Ground, to the Depth of two or three Inches, and scatter abroad abundance of fresh Mould.

When you have gone over the Ground with this pointed Roller, sow it with *Turnep seed*, about ten Pound upon an Acre; and, when the Seed is sown, let your smooth Roller (the heavier the better) be drawn over it. This will press the Seed into the fresh Earth, and cover it very well. These Turneps, when they come up, shou'd be *Hoed*, if they grow too thick; a Labour, which every Countryman knows the manner of performing:---It wou'd not be amiss, to steep this Seed in *Soot*, and *Urine*, as was directed about *Clover*. Thus have you two Crops in one Year; and your Ground much better'd, by the Growth of the Turneps.

This latter Crop, being gather'd and dispos'd of in the Winter, you must, about the end of *February*, or beginning of *March*, have given your Ground a good, deep Plowing, and immediately sow it with the best, white *Pea*, you can obtain: The best way to sow them is, after the same manner, as
you

you did your *Wheat*, upon that very Soil ; and so two Bushels will be enough upon an Acre.

One Plowing, after the Pease are off, about *Michaelmas*, and another in *February* after, will certainly qualify the Land, for an admirable Crop of Barley.---And, as soon as this third Harvest is over, remember the foregoing Directions, and prepare your Ground, as you did the *heavier* Soil, when you sow'd *Clover*.

Now, there is a foreign Grass much properer for *light* Lands, than *Clover* ; 'tis generally known by the Name of *St. Foyne* ; but that, which I have seen, in several Parts of *Berkshire*, *Wiltshire*, *Somersetshire*, and many other Counties, is a bastard sort, and much inferior to the true *St. Foyne*, which may be had, very reasonably, from *Dunkirk*, or *Calais*, and is yearly imported in great Quantities, and sold in the Seed-shops at *London*, and elsewhere.

This Seed, being much larger than *Clover*, must be sow'd in a much greater Quantity. Four Bushels to an Acre, will be better than three, which is the least you can venture

venture to sow.----Observe the Directions given you for Clover, as to Manuring, while the Turf is tender, and the Earth frozen; but as to the time of letting it grow, that may, if you please, be *five* Years, for so long it will continue in its prime Perfection; and, running into a large knotty Root, does so enrich the Ground it grows on, that, after it has born *St. Foyne* five Years, it will afford three excellent Crops of what Corn you please; and so improve itself, by alternate Burthens of *Grass*, and *Grain*, till it arrives at the utmost Perfection, which Land is capable of reaching.

Nothing is so Sweet, nothing so Innocent, nothing so Nourishing, as this *St. Foyne*; but, above all, it is observ'd to increase Milk, in Quantity, and Quality, beyond any *Grass*, yet known, in the whole World. And it is, for this Reason, that I advise you to keep *Cows* upon it, and make your five years Profit, by a *Dairy*.

But, when I say a *Dairy*, imagine not, that I mean such a *Dairy*, as is commonly kept in *England*: Wou'd you know what kind of *Dairy*?---I will hasten to inform
you,

you, and conclude my Effay, with this useful Particular.

The worst Acre of your hundred, improv'd by this *Grass*, will very well maintain *four* Cows, from the first of *April*, to the end of *October*, and afford, besides, a sufficient store of *Hay*, to make good part of their Subsistence the four Winter Months following.

You must buy then about four hundred *Milch Cows*; but take Care you chuse them with Judgment: There are bought your largest sort of *Runts* from *Wales*, for less than fifty Shillings a Cow, with a good Calf at her side, which good Husbonds dispose of, as soon as they can.---You will observe, that they may make too good a Use of the Milk, to afford the Calf his share of it.---They shou'd keep these Cows about twelve Months, and then, selling them for about four Pounds a piece, stock themselves with such, as are *New-Milch'd*. They shou'd observe this Rule, every Year, and the Trouble is rewarded sufficiently, by the Advantage it will bring them; for, besides the Profit they, will make, by *selling* dearer than



than they *buy*, they avoid the Inconvenience of having any thing to do with *Bulls*, and the Consequences ; so that they wou'd preserve the Cows in their *full Milk*, and find it no uncommon thing for one of these *Welsh* Cows to be milk'd twice a Day, and afford a Gallon and a half at a Meal.---Four hundred of these Cows will cost a thousand Pound, and you will perceive, that, coming from a *poor* Pasture to a *rich*, they will prosper, and encrease, both in Milk, and Size.

In eight convenient Places about your hundred Acres, let there be built eight thatch'd Sheds, a little rising in the middle, to carry off the Rain : The height may be *ten* Foot, and the Breadth *thirty*. Each of these Sheds shou'd be a hundred and twenty five Foot long ; and, under the highest Part, directly in the middle, you may raise a slight Partition, lath'd, and plaister'd, which serves to support the Ridge of the Roof ; while the two Sides are sustain'd by square wooden Posts, about eight Foot high, and plac'd at proper Distances.

On either side of the Partition Wall, let there be fix'd a kind of Rack, like those in
Stables,

Stables, which is to run the whole length of the Shed, and must be plac'd as high as a Cow can reach her Fodder from. The Shed must, next, be divided into *Stalls*, like those for Stone-Horses; and each Stall will be about five Foot broad: The length of these Stalls shou'd be exactly fitted to that of a Cow, that a cross Bar being plac'd at the outward end, may keep the Beasts from running backward.---Thus every Shed will hold fifty Cows, five and twenty on each side of the Partition.

To every one of these Sheds you must appoint a Man, whose Business it will be to clean the Place, and carry off their Dung; as also to mow the *St. Foyn*, every Day, and give it to the Cows, in the Racks before-mention'd. This Man, beginning at one end of his Proportion of Ground, and going gradually on to the other, the first Place will always be fit to mow again, by that Time he has gone through his whole Division:---Your Cows are thus fed at Discretion, with neither too much, nor too little; They are not pester'd with the scorching Heats, nor troubled with the stinging Fly; which,
in

in open Pastures, often makes them whisk about, and trample down more Grass than they eat.

At each End of every Shed, you must build a slight Room of Brick, thirty Foot square, and ten Foot high ; which is to be divided the Cross way of your Shed, into two Partitions, each fifteen Foot broad, and thirty Foot long. That, which joins to the Cow-house, must be pav'd with Tiles, and is to serve for a *Dairy* ; the other must be Floor'd, and Window'd, and is to be a Lodging Room for Dairy Maids.

Every Shed will require five Maids, that is, to every ten Cows, one Dairy Maid : Fewer might serve, but 'tis better to exceed, than fall short in this Particular. Thus, each Dairy will have two or three Maids belonging to it, whose Lodging will be the Room adjoining, and whose Care is to extend into the Shed, on both sides the Partition, to the five and twenty Cows, which are nearest to their Station.

All along both sides of the Partition, at about a Foot above the Ground, let there be fix'd close to the Wall, a strong Pipe of
Lead,

Lead, a little less than an Inch Diameter, both which Pipes, being somewhat rais'd, exactly in the middle of the Shed, must have a gentle, and almost invisible Descent, from that Rising, to the Dairies; through the Walls of which their nether Ends are to be brought, and there wrought into one another, that whatever descends through them, into either of the Dairies, may have issue but at one Mouth.

This Mouth of the Pipes must be made very small, and neatly fitted into the hollow end of a strong wooden Axel-Tree; so that while the Axel-Tree is turning swiftly round the mouth of the Pipe, it may by no means strain it by the Motion, but receive into its own Hollow the Milk, which descends through the leaden Pipes, without spilling any.

This Axel-Tree is only hollow for three Foot of its length, and passes so far through a Wheel, or Vessel, like a Barrel, only much larger, in its Circumference. The Axel-Tree, which this Vessel is to turn upon, is bor'd very full of round Holes, thro' which it delivers the Milk into the Vessel, as
4
fast,

fast, as it receives it from the Pipe. The Vessel must be capable of containing, at least, three times the Quantity of Milk which it is design'd to receive ; and there must be six Wings, or thin pieces of Wood, glw'd on, to the hollow Axel-Tree, whose Length, and Breadth, must be so contriv'd, as to leave a free space of six Inches, at either End of the Axel-Tree ; and a Foot, between their Edges, lengthways, and the smooth inside of the Vessel ; in the most convenient Part of which must be contriv'd a Door, to open, and shut down upon occasion, as closely, as if there was none. This Door will perform its Work very neatly, if you line the Inside, and Edges, with the same kind of Cloth, which is commonly us'd in the pressing of Cheeses.

The other solid end of the Axel-Tree must extend itself to about five Foot longer, and the whole Length may be supported by square, wooden Posts, and *turn*, in their Tops, which are to be made hollow, and kept greas'd, for that Purpose. This end of the Axel is to be fasten'd into a Wheel, exactly like those, which are us'd in many Places, for the roasting Meat. The Diameter of

N

this

this last Wheel must be within six Inches of the height of the Dairy ; and two or three large Dogs, being put into it at a Time, will *turn* it, with extraordinary swiftness. The Dogs are easily taught, and will, at last, take Delight in the Exercise : I have known a large *Buck* brought up to the Practice of this Labour ; and it is wonderful to see the Force, with which he runs round, an Hour, or two together, and turns a Wheel of ten Foot Diameter.---But you must make your Wheel as light, as it can possibly hold together.

I have but one thing more to say, and I finish this Direction. Pretty near that side of every Stall in your Shed, to which the Maid must come to milk the Cow that belongs to it, let a Hole, as small as will serve the occasion, be contriv'd by your Plumber, in the upper Part of the leaden Pipe, to shut, and open, with a little Screw, which Screw, for fear of losing it, may be fasten'd, by a little Iron Chain, to the Body of the Pipe.

I have endeavour'd, in the Description of all this, to make my meaning, as plain as possible. If you do not comprehend it, at first,

first, you *will* after two or three times Reading, and Considering it. I wou'd have no Man imagine, that I propose a thing too Troublesome; for one great Benefit in the Practice, I am here recommending, is, that it will save above half the Labour, which is, at present, absolutely necessary in every Dairy in the Kingdom.

The milking Pails, which must be us'd here, are very broad, and shallow; in shape, not much unlike a Baker's *Sieve*. They must stand upon three Legs, of a little more than a Foot high; and, from the Bottom of one part of the Rim, must come a long tin Pipe, somewhat resembling the neck of a *Still*, the Nose of which is to be put into one of the Holes in the Leaden Pipe; and the Pail, at the same Time, standing under the Cow; the Milk, as fast as it descends through the *tin* Pipe into the *Leaden* one, is thence convey'd into the Vessel, which I, just now, describ'd, in the Dairy.

Observe, that, to prevent the Hairs, or other Impurities, from descending with the Milk, the mouth of the tin Pipe, which opens into the Pail, is to be cover'd with a straining Cloth. Thus, the Maids, removing

moving from one Stall to another, dispatch their Work neatly, and must remember to skrew up every Hole, before they leave it.

Morning, and Evening, before they begin to milk, they must put their *Dogs* into the great Wheel, by whose motion, the Vessel, which I call a *Churning-Mill*, being turn'd swiftly round, receives the Milk, yet warm, thro' the little Holes in the hollow Axle-Tree; and, by the means of those six Wings, I mention'd, it is agitated with so great a Violence, that there is not only a much larger Quantity of Butter produc'd this way, than by the other, but it is, in every Degree, so much beyond it, even in Taste, and Colour, that the Difference is incredible. And what is yet a more considerable Advantage, the *Cheeses*, which you make of the Butter-milk, may be reckon'd, among the best, and richest, kinds in *England*.

When the Dairy Maids return from Milking, by that time they have wash'd their Pails, and taken a little rest, they have nothing to do, but open the Door of the Mill, and gather the Butter, which they will find in a huge Heap, ready churn'd to their Hands; after which, letting out the remainder

der into a Cistern, which shou'd be near, they may proceed to make it Cheese, in the very same manner, as they wou'd, in the common Practice of their Country.---But the *Dogs* must, yet a little longer, continue in the Wheel.

You will wonder what Business they have in the Wheel, when the Vessel is empty? ---Your Maids must have a good Quantity of *hot* Water just now in readiness, the greatest Part of which must be pour'd into the Vessel, and the Door made fast upon it; the *Dogs* may then be permitted to renew their Labour, for half a Quarter of an Hour, in which Time the Vessel will be compleatly wash'd, and scalded, and then the Water being let out, the Door must be kept open, till next Milking time.

The leaden Pipes are kept sweet by the same means; for, in that middle Part, where each Pipe rises highest, is to be a larger Hole than any of the other, into which a shallow, broad Funnel, being put, a convenient Quantity of scalding Water must be pour'd in, which runs thro' the Pipe into the Churning-Mill, and carries away all the reliques of the Milk, as it passes along.

It

It would be a needless Labour, shou'd I go about to compute the particular Charges of such a *Dairy*. Every Reader will be able enough to do that for himself, and, consequently, judge of a greater, or smaller, in Proportion. I will only tell you what is a most certain Truth, that you will seldom have a Cow, which shall bring you so little Profit, as ten Pound a Year, and yet, at such a Computation, the yearly Income of your hundred Acres, thus employ'd, will amount to four thousand Pound.

And now, I hope, I have sufficiently made good my Assertion in the Title Page of this Treatise, (*viz.*) That every private Gentleman, in *England*, may double his Fortune, in one Year's Time, by Skill, and Industry, in the *Art of Husbandry*; which that they may diligently, and expeditiously put in Practice, both for the great and certain Profit to *Themselves*, in particular, and to the Kingdom in general, is the sincere and ardent Wish of the Author, who concludes this Essay with that noted Exclamation of *Virgil*.

O Fortunatos nimium, sua si bona Norint,
Agricolas! quibus ipsa, procul discordibus Armis,
Fundit humo facilem Victum justissima tellus.



